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PACIFIC BELL TELEPHONE COMPANY

16 UNITED STATES DISTRICT COURT
17 EASTERN DISTRICT OF CALIFORNIA

19 CALIFORNIA SPORTFISHING
PROTECTION ALLIANCE,

20 Plaintiff,

21 vs.

22 PACIFIC BELL TELEPHONE COMPANY,

23 Defendant.

Case No. 2:21-cv-00073-JDP

**DECLARATION OF PETER C. MEIER
IN SUPPORT OF PACIFIC BELL'S
OPPOSITION TO BELOW THE
BLUE'S MOTION RE
RECONSIDERATION**

Judge: Hon. Jeremy D. Peterson
Date: January 25, 2024
Time: 10:00 a.m.
Courtroom: 9

Action Filed: January 14, 2021
Trial Date: None

1 I, Peter C. Meier, declare as follows:

2 1. I am a partner at the law firm of Paul Hastings LLP and counsel for Defendant
3 Pacific Bell Telephone Company (Pacific Bell). I make this declaration in support of Pacific Bell's
4 Opposition to Below the Blue's (BTB) Motion to Partially Reconsider Order to Compel and for
5 Protective Order. Unless otherwise indicated, I have personal knowledge of the matters set forth
6 below and, if called as a witness, I could and would testify competently thereto.

7 2. Attached as **Exhibit 1** is a true copy of relevant portions of the transcript prepared
8 for the Lead Contamination Conference Call held on July 18, 2023 by Capstone Special Situations.
9 The included excerpts contain statements made by Plaintiff's counsel William Verick, who was
10 invited to speak at this event.

11 3. Attached as **Exhibit 2** is a true copy of the Environmental Defense Fund's (EDF)
12 "Lead Cable Investigation" report dated June 30, 2023. The report states it was prepared by BTB
13 on behalf of EDF. As of January 11, 2024 this document is available on EDF's public website at:
14 [https://www.edf.org/sites/default/files/2023-07/MTS_EDF%20Lead%20Cable%20Investigation](https://www.edf.org/sites/default/files/2023-07/MTS_EDF%20Lead%20Cable%20Investigation_Final.pdf)
15 [_Final.pdf](https://www.edf.org/sites/default/files/2023-07/MTS_EDF%20Lead%20Cable%20Investigation_Final.pdf).

16 4. Attached as **Exhibit 3** is a true copy of a contract titled "Marine Taxonomic Services
17 – EDF Service Agreement FY22 (Lead)" between EDF and Marine Taxonomic Services (MTS)
18 and executed by Seth Jones. Pacific Bell obtained this document on September 8, 2023, in response
19 to a subpoena served on EDF.

20 5. Pacific Bell has served subpoenas on the testing companies engaged by EDF and by
21 The Wall Street Journal: Pace Analytical Services, Enthalpy Analytical, and Complete
22 Environmental Testing, Inc. These testing companies have not claimed the reporter's privilege in
23 responding to Pacific Bell's discovery requests.

24 6. Attached as **Exhibit 4** is a true copy of an August 15, 2023 e-mail among Seth Jones,
25 Monique Fortner; Alan Freeman, Toke Vandervoort, Tom Neltner, and Riley Day. Pacific Bell
26 obtained this document on October 24, 2023, in response to a subpoena served on EDF.

1 7. Attached as **Exhibit 5** is a true copy of an e-mail received by Navi Dhillon on
2 November 24, 2023 from Joshua Koltun. In his e-mail, Mr. Koltun identified himself as counsel
3 for BTB, MTS, Seth Jones, and Monique Fortner.

4 8. On November 29, 2023, I conferred with BTB's counsel Mr. Koltun. During that
5 call, Mr. Koltun represented that BTB had entered into an oral agreement with The Wall Street
6 Journal. According to Mr. Koltun, under that oral agreement Seth Jones and Monique Fortner
7 agreed to act as reporters for The Wall Street Journal in connection with the Journal's series on
8 lead-clad cables.

9 9. Attached as **Exhibit 6** is a true copy of an August 1, 2023 e-mail between Plaintiff's
10 counsel Kirk Boyd and Gordon Binkhorst regarding Dr. Binkhorst's retention by Plaintiff as an
11 expert. Pacific Bell obtained this document on September 20, 2023, in response to a subpoena
12 served on Dr. Binkhorst.

13 10. Attached as **Exhibit 7** is a true copy of a September 12, 2023 e-mail between
14 Plaintiff's counsel Mr. Boyd and Dr. Binkhorst. As reflected in the e-mail, Dr. Binkhorst sent
15 Plaintiff's counsel the "investigation into the lead sheathed cables done by Marine Taxonomic
16 Services/Beyond [sic] the Blue for the EDF[.]" included as Exhibit 1. Pacific Bell obtained this
17 document on September 20, 2023, in response to a subpoena served on Dr. Binkhorst.

18 11. Attached as **Exhibit 8** is a true copy of a September 12, 2023 e-mail between
19 Plaintiff's counsel Mr. Boyd and Dr. Binkhorst. As reflected in the e-mail, Dr. Binkhorst sent
20 Plaintiff's counsel the "'California Data Collection-Final' reports" prepared by Pace Analytical
21 Services. Pacific Bell obtained this document on September 20, 2023, in response to a subpoena
22 served on Dr. Binkhorst.

23 12. Attached as **Exhibit 9** is a true copy of Plaintiff's Responses to Defendant's First
24 Set of Interrogatories to Plaintiff. Pacific Bell received this document from the Plaintiff on
25 September 20, 2023.

1 I declare under penalty of perjury that the foregoing is true and correct, and that this
2 declaration was executed on January 11, 2024, in San Francisco, California

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4 By: 
5 Peter C. Meier
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EXHIBIT 1

Lead Contamination Conference Call 7-18-23

Moderator: Good day, and welcome to the Lead Contamination Conference Call. At this time all participants have been placed on a listen-only mode. The floor will be open for questions and comments following the presentation. It is now my pleasure to turn the floor over to your host, Alec Vaughan. Sir, the floor is yours.

Alec Vaughan: Thank you, and good afternoon, everyone, and thank you all for joining us today for our call on lead cable contamination. My name is Alec Vaughan and I'm a Senior Analyst on the Special—Special Situations team at Capstone. Capstone is a policy analysis and regulatory due diligence firm, and because our clients invest in publicly traded securities, I would like to ask all participants to not discuss any non-public or confidential information, or any information regarding which you owe a duty of confidentiality to your employer. So, today's call will be focused on the Wall Street Journal's investigation into the telecommunication industry's usage of lead cables throughout the United States. We are joined today by Bill Verick, an attorney at Klamath Environmental Law Center with over 34 years of experience in environmental law. Bill also represented the California Sportfishing Protection Alliance in their lawsuit against Pacific Bell Telephone Company, a subsidiary of AT&T whose lead cables were found at the bottom of Lake Tahoe. Bill, I can quickly pass it over to you for a brief introduction on yourself and any other opening remarks that you may have.

William Verick: Sure. So, I graduated—after I graduated from law school, I worked for a downtown San Francisco law firm for a couple years doing mainly securities litigation, ironically. And then I did—I didn't set up the Klamath Environmental Law Center for a while but I—I did forestry defense, mainly trying to stop logging of old growth redwood trees on private land in California. And I almost went—became homeless doing that, because it was so unremunerative that I just couldn't keep doing it. So, I got into doing mainly proposition—California Proposition 65 enforcement of the right to know provisions of Proposition 65. I've been doing—that's been the bread and butter of my practice now for—since 1995. And what I've done with my colleagues is, among other things, several large industry-wide settlements that were a form of private rule-making, setting reformulation standards for things like lead in maple syrup, PCBs in fish oil supplements, lead in the insulation on computer and consumer electronic cords and things like that. I've also done a couple of cases involving just the Proposition 65 discharge to drinking water provisions, and I've done enforcement actions under the Resource Conservation Recovery Act, otherwise known as RCRA. So, that's, that's my bio.

Alec Vaughan: Awesome. Great. Thank you so much, Bill. And so, let's dive in first with some prepared questions that I have today, and then towards the end of the call I'll open up the line to give the audience a chance to ask any questions that they may have.

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So first off, I think a natural place for us to start would be your work with the Lake Tahoe case. So, can you provide a bit of a lay of the land for everyone on the call regarding how the lawsuit came about, what provisions were used to bring the lawsuit, and how it was determined that the abandoned cables belonged to an AT&T subsidiary?

William Verick: Yeah. So, we had been interested—my colleagues and I had been interested in an abandoned cables case for a long time, and we hadn't even thought about Lake Tahoe. And we didn't bring one because we couldn't think of a way that we could access one of those cables and actually dig down to it, because most of the, most of what we were thinking about were submerged cables, actually, digging down to it and testing it to see if it had lead. And, you know, you have to have a certain amount of evidence to bring a case. If you don't, you can be sanctioned. So, what happened with us was there was this diver, Seth Jones, who is—plays a prominent part in the Wall Street Journal's articles, and he is a professional diver that does, you know work—very, lots of different kinds of work, and he's got a, he's got a thing about disposal of, you know, garbage into Lake Tahoe. You know, working, he finds piles of construction debris from when they built somebody's mansion on Lake Tahoe. And he found these cables, and did a little bit of read up on them and got an idea of what they, what they, what they were made of. And what the status of the cables were, they had been abandoned I think in the 1980s or maybe the early '90s. And to abandon them on the bottom of Lake Tahoe, which is owned—the bottom of Lake Tahoe is owned by the State of California. He had to get—they had to get a permit from the State Lands Commission. And the State Lands Commission said, okay, you can abandon them there, but you have to cut the ends off of them and pull the ends into the lake far enough so that they would be submerged deep enough that nobody could hit them with a boat and so that they couldn't be seen. And so, they were left there. And so, they were abandoned. And so, Seth cut like about a six-foot section of this four-inch cable that probably weighed 200 pounds and retrieved it and brought it—cut a foot of it off, and took it all apart, and weighed the various components, and determined that every foot of that cable contained three pounds of lead. He brought the rest of it to us, and we got a kiddie swimming pool and filled it with Lake Tahoe water and let the cable sit in it for like a day, and then we took a water sample, and sent it off to a lab, and had astoundingly high levels of lead in the water. So, we had the evidence that we needed to bring the case. So, we were pretty certain that it was AT&T or AT&T subsidiary whose cable it was, because of the size of it. And when it was put in, AT&T basically had almost a complete monopoly on telephone service in California, with a few minor exceptions. And so, we went to the State Lands Commission and we did a Public Records Act request asking for any communications with Pacific Bell Telephone Company and the State Lands Commission regarding telecommunications cables on the bottom of Lake Tahoe. And we got a response to that, and that showed that the cables were Pacific Bell's. And

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so, we had what we needed to—what you have to do under both Proposition 65 and RCRA, the Resource Conservation Recovery Act, is you have to send notice letters to public authorities. And with, under Prop 65, you have to wait 60 days, and under RCRA you have to wait 90 days. And if a public agency wants to take the case, well then you can—you don't get to run the case, but you can come along for the ride. And neither public—no public authorities wanted to take the case, and so we filed the case in Eastern District of California in Sacramento, and drew a judge who was pretty unfavorable to Prop—to environmental concerns of any sort, which, you know, that was, that was in the background of everything that we did on the case. We knew that we had a judge that was not good for us. So, we negotiated with AT&T, and they agreed to take out the cables. And so, we reached an agreement where they would do an evaluation. They would figure out how much it was going to cost, and if it was going to cost less than \$1.5 million they would take them out. And if it was going to cost more than that, they could refuse to take them out, and then we could just continue with the lawsuit and try to make them take it out. And so, they went through two years of permitting, and it takes a long time to get all the permits that you need, especially on some kind of an icon, icon like Lake Tahoe. And that's just about played out now. The permits have been issued, and AT&T is going to begin removing the cable right after Labor Day.

Alec Vaughan: Great. Thank you. Really appreciate you giving a good lay of the land there and background on the Lake Tahoe case. So, one of the things that we're all trying to think through here is whether or not it makes sense from an environmental perspective to just leave some of the lead cables in the ground or in the water, or if it's better to have all of them removed. So, curious if there was any work done in the Lake Tahoe case to determine whether removing the cables would actually cause more contamination or if removing the cables was seen as favorable.

William Verick: Yeah, well, in those—in these kind of cases, and we've done a bunch of cases involving contamination—the polluter always claims that it'll be worse if we try to do anything than if, anything that costs us money will be worse for the environment than if, if it didn't cost us money. And so that's an argument that they use, and it's not a completely implausible argument. The cables in Lake Tahoe, I don't know if you—I mean, there are some pictures of them in the Wall Street Journal studies, I mean stories, and they're just laying on the lake bottom. They're not buried or anything like that. And so, I mean, the argument can be made that moving the cable might cause some sediment to come off of it, and so it would cause momentary turbidity in the water, and we just laughed that off. And I don't think—we don't think that that was a serious argument. There are, a lot of the kind of argument that you're talking about, though, is really—would really be site-specific. Like what all, what all is there in addition to the cable? The notion that you would get, make it worse—things worse, is that if you were

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to dig it up, and contaminated dust around it would get all over the place, and spread and contaminate people, and contaminate the workers. But for the most part, these cables, the lead part of these cables is deep inside the cables. And there's, you know, lead—some of the data that the Wall Street Journal came up with showed that there is lead contamination of the soil right around it, and there are tons of ways of dealing with that. This is not a new thing, digging things up. And if there's contaminated soil, digging the soil up and sending it off to a landfill, it may not make sense to dig the soil up and get rid of it, depending on what the level of lead contamination is and where it is. If it's in water, it probably is more of a concern. I think under the law, under RCRA, people could be made to clean it up, to dig it up, and clean up the contamination regardless of where it is, because the standard under RCRA is if something may, and the word is may, cause an imminent and substantial endangerment to human health or the environment. And the environment includes, you know, algae in Lake Tahoe, and sort of freshwater plankton, and stuff like that. So, the standard is pretty, is pretty strict under RCRA. Generally, the approach taken by government agencies is to not do that. It's been fairly permissive, and the agencies don't want to have that kind of a nightmare on their hands.

Alec Vaughan: Interesting. So, just to clarify quickly, you're saying under RCRA, that would mandate a cleanup of not only the lead cable, but also the contaminated soil, water, that is surrounding the cable. Did I understand that correctly?

William Verick: Yeah. They don't clean up contaminated water unless it's, like, isolated somewhere. How could they clean up contaminated water in Lake Tahoe? Lake Tahoe is, you know, over 1,000 feet deep in places and it's, you know, it's a giant lake. And the lead spreads out into the lake, and as soon as you get in there and start trying to do anything in an area where you might have an increased—temporarily increased level of contamination, you're just going to stir up the water, and it's going to mix it in with the rest of the water of Lake Tahoe. That, that kind of cleanup would definitely be more destructive than it would be worth, because if you just take a water sample from some random place in Lake Tahoe, you're going to find virtually no lead in it. So, as much of the lead that has soaked out of that cable as has done, lead levels, overall lead levels in Lake Tahoe are super low.

Alec Vaughan: Got it. Got it. So in the settlement with AT&T, I'm curious, was the recycling or the recovery value of the lead cable used to offset any cleanup cost considerations?

William Verick: Well, I would, I would, I would think so. It's going to be recycled, and the information that we have from recyclers is that those cables are really valuable and desirable to recycle. Now, we don't—you know, our negotiations with AT&T, we took

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that into account. We just presumed that that would be something that they would do, and we presumed that they're going to, you know, accept bids from recyclers to recycle that stuff once it's taken out of the lake. In other places we know, in places like Ohio, some of these cables have been taken out and recycled. And the recyclers pay for the privilege of taking the cables out. They're worth enough to do that. That may not be the case in all places, but the materials definitely are valuable, and, and AT&T is mighty rich, but they're not rich enough that they could just, like, give that stuff away. So, we presume that they are going to make—you know, get some revenue from that, whether it completely offsets the cost of the cleanup. I kind of doubt that, but it'll come close. And I mean, I think the, the biggest chunk of cost of the cleanup in Lake Tahoe is the permitting, not the actual removal of the cable. Getting—you know, hiring the consultants that you need to deal with the Army Corps of Engineers, and like 18 different state agencies, and jumping through all the hoops that each one of them want you to do, and all the, you know, all the fancy documents that have to be produced and all that, I mean that must have cost a lot of money. I mean, I'm on the public—I'm on the board of a public drinking water agency, a local agency. You know, when we get a grant to replace like a mile of water line, the grant includes, you know, like \$50,000 just for the, to pay for the permitting compliance that we have to do to be able to do that. So to do, to remove the cables, the permitting, and you're going to have to get permits to do that, that's going to be expensive. But I don't know how much it would be in that case.

Alec Vaughan: Do you think the permitting issue is exclusive to California or do you think other states have similar kind of onerous permitting rules that would make this more expensive?

William Verick: Oh, I think a lot of, I think a lot of states have those permitting rules, and the Army Corps of Engineers is nationwide. So, if you're dealing with water, any kind of navigable water, so where these things go under the Great Lakes, for example—and I'm sure they crisscross Lake Michigan in multiple places—where they go under the Mississippi River, or any of the major rivers, across San Francisco Bay, across Long Island Sound, across Chesapeake Bay, Biscayne Bay, you know, you're going to have to get permitting from, permits from the Army Corps of Engineers at least. And, you know, and the permitting model that is used is, what happened is California passed the California Environmental Quality Act, and then the federal government passed the National Environmental Policy Act, which is patterned after the California Environmental Quality Act. And then lots of states passed their own similar Environmental Review Acts patterned after NEPA. And so, not all states have those provisions, but a lot of them do.

Alec Vaughan: Got it. Got it. Okay. And one other thing I want to touch on, too, in the Lake Tahoe case is what factors of the Lake, of the Lake Tahoe case were impacted by

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the fact that Lake Tahoe is a source of drinking water? Like, how could the case have gone differently if it was a lake that wasn't being used for drinking water?

William Verick: Well, in California, the State Water Resources Control Board has passed a resolution that says that all surface fresh water in the state is considered to be a source of drinking water. That means that it can be used for drinking water with a few exceptions. If it's super polluted already, it's not. And if it's somewhat brackish, it's not. But, you know, any spring that's bubbling up, if it runs off of somebody's property, road—water running in a road ditch is considered a source of drinking water. So, Proposition 65 applies to sources of drinking water, the discharge to drinking water provisions of that apply to drinking water. And so that would—that means that in California, that provision could be used, you know, for the Napa River, for the Sacramento River Delta, the Sacramento River, the San Joaquin River, the, you know, the Klamath River, and, and any kinds of, like, freshwater wetlands that the cables might be running through as well. I'm not sure that anybody but us would think about bringing a case like that. But we're certainly thinking of it.

Alec Vaughan: Got it. Got it. Okay. And I'll ask a pretty open-ended one here as we kind of shift gears towards the current situation. So, just wanted to gauge if you had any reactions or opening thoughts that you'd like to kind of share after you read the Wall Street Journal's investigative piece.

William Verick: Yeah. Well, one of them was humility, because, you know, we litigated the Lake Tahoe case that was kind of brought to us on a platter. And the Wall Street Journal went out and spent a lot of time and did a lot of digging, and found out stuff that we wish we had known when we were bringing the case. We didn't go to Lake Tahoe and take water samples near the cable. They did. And we didn't take samples of soil near cables. They did. And, you know, until this article came out, I didn't realize that they were, these leaded pipes, smaller ones, are—had been suspended from telephone poles that run through residential neighborhoods. I didn't know, I didn't know that was the case. So yeah, I thought—I was in awe of the job that the reporters for the Wall Street Journal did. They deserve a Pulitzer, in my opinion.

Alec Vaughan: Yeah. Yeah. There's definitely some thorough reporting on their end. So, look—taking a look at what can be done moving forward, there seems to be a few different authorities the EPA has at its disposal to mandate the telecom providers to clean up the lead cable. So, one that we touched on is RCRA, or the Resource Conservation and Recovery Act. One could be the Comprehensive Environmental Response, Compensation, and Liability Acts, also known as CERCLA, or Superfund. And then there's also the Safe Drinking Water Act. So, I was curious, do you have any

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insight into which of these are the most likely avenues the EPA could take for remediation?

William Verick: Well, I mean, if the, I mean, if the EPA decided to do something, I would think that they would be crazy not to use all of those. You're not, you're not limited to only one. You can use all of them. You throw, I mean RC—you have to understand that RCRA and CERCLA are complementary. They're not-- it's not one or the other. One of them is intended to provide the, the power to get a court to order somebody to clean something up. That's RCRA. And then CERCLA is focused on who has to pay for the cleanup. And, you know, when it was first passed, there was a tax on chemicals. And so there was a fund that was generated, and so the government had money that was generated that way to help pay for the cleanups. That's why it was, part of it was called cleanup. But I don't think—that's not that relevant anymore. CERCLA is used—I can give you a couple of examples. CERCLA is used even in—well, it's used by state agencies. For example, when the state agency has brought an action—in California it would be the Department of Toxic Substances Control. And so, there was a battery recycling plant in Southern California that, you know, went on for years, it was a smelter. And it contaminated a vast area of the poorer parts of Los Angeles with massive amounts of lead. And so, by the time the agency finally got around to trying to get them to clean it up, you know, a lot of contamination had happened. So, Exide just basically went belly-up. It went bankrupt. It got relieved of its obligations to do any cleanup or pay for any cleanup by the bankruptcy court. And it ceased to be—in October of 2020, it ceased to be—it ceased to exist as a functioning business entity, that's what it said. And so, then what happened is the Department of Toxic Substances Control used CERCLA to go after the people who brought the lead to the smelter, the people who transported it to the smelter, and, you know, tried to get them to have to pay for it too. And, you know, even a company like AT&T would, would be really, really, really, really challenged to pay for a cleanup that has contaminated, you know, several square miles of Los Angeles with toxic levels of lead dust. And so, you know, they're going to do cleanups here, and they're going to do a little bit of cleanup there and they're going to leave large areas, you know, contaminated, and that's just the way it goes. So, I would expect that probably the biggest thing that I learned from the Wall Street Journal article was that in 1956—by the year 1956, AT&T was using 100 million pounds of lead a year, and that it had its own smelters. And a lead smelter is way different from these cables. Lead smelters cause massive Superfund sites, which is what the Exide plant in Los Angeles was. There was a big lead smelter up in a place called Wallace, Idaho, up in the panhandle of Idaho, that contaminated, like, you know, 50 miles of one of the most beautiful wild and scenic rivers in the whole United States, and all the communities along, along the way. And it was the same thing. The smelter company went bankrupt, and then it was the government left picking up the pieces,

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trying to find other people that they could stick with the cost as well, and business entities declaring bankruptcy to get out of having to pay for it. So that's, that's how things tend to work. You know, if you're interested in what's going to happen to AT&T's stock price, and, you know, the alternative—the way that they might deal with the smelter thing is to declare bankruptcy. Well, what does, what does that do you know, to people who hold common stock? I don't know that that's going to happen. Nobody's gone after AT&T's smelters yet. But I think some people are thinking about it.

Alec Vaughan: Mm-hmm. So, I guess the natural extension to what you were talking about is, could AT&T try to pin some of these costs on maybe some of the cable manufacturers? Would that be something that wouldn't surprise you?

William Verick: Yeah. Under CERCLA, you know, there are things called PRPs, potentially responsible parties. It's basically anybody who, who touched or concerned the offending real estate or objects. And so, we did some cases here in Northern California involving wood treatment, chemical pentachlorophenol where, you know, Louisiana Pacific, Georgia Pacific, Pacific Lumber Company, major, you know, Fortune 500 companies, were using this chemical to spray on to lumber that was being used to build homes. And every single one of these mills that used it has a toxic plume underneath it. And what happened with a lot of these places, one that, one I can tell you about, in particular, because I know a lot more about it is, the company went bankrupt. The company that owned the, the company that owned it went—the mill went bankrupt because of this. The banks refused—the banks that held the mortgages on the property refused to, to foreclose on the mortgage because they didn't want to wind up with a deed granting them title to that property because then they would be on the hook. And what wound up happening is the widow of one of the guys who was one of the owners, they wound up taking her house. So, it came down to that. And that's, that's the kind of thing that can happen. That litigation is, you know, it involves rooms full of lawyers where junior associates are set to sit around a conference table, while, while, you know, while a deposition is being taken. And, you know, you have like 25 lawyers sitting in there, each one of them billing. So, that's the kind of thing that happens when they're fighting over who winds up having to pay for it.

Alec Vaughan: And so, I guess, understanding the mechanics of that a little bit, if EPA orders a cleanup, what is kind of the protocol for paying for it? Is it EPA initially pays for the cost of it, and then whoever is a PRP, or potentially responsible party, will then reimburse EPA, is that how it works?

William Verick: I think it's a fairly—I don't think there's any set model for that. I mean, I have to, I have to say that I don't practice under CERCLA. I mean, I know about it, and I

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know about some of the implications of it. My experience is that the EPA might want to try to order a company to do something, but a company, if it's going to cost the company a lot of money, the company is going to say, so sue me. And that's what winds up happening. And so, the litigation takes years, and nothing gets cleaned up while the litigation is happening. And the companies try to, you know, compartmentalize all of their environmental liabilities into some subsidiary, and then have that subsidiary declare bankruptcy. There's all that kind of maneuvering that goes on. And they're all suing each other. And it's a full employment act for lawyers, that's for sure.

Alec Vaughan: And I know, so most of your experience—

William Verick: I mean, wait, let me just add to that, which is, since the days—since the CERCLA fund, the cleanup fund has—I don't, I don't think that was renewed by Congress when it, when it came up. And the tax on chemical, the chemical industry is not in place anymore. And so, the EPA doesn't have the money, they don't have the money appropriated, you know, Congress doesn't like, just, appropriate them, like, you know, \$25 billion a year to do cleanups. They have to, they have to litigate that, and force the private companies to come up with it. And if it's bad enough, I mean, if it's killing people, if kids are dying, and fish are going belly up, then the government might, might clean it up, but I've never seen that happen.

Alec Vaughan: Got it? Got it. Okay, super helpful. So, I've got a few more prepared questions here. But given where we are on time, I'd like to give our audience a chance to ask any questions they may have. So, operator, can you please provide instructions for the audience so they can ask questions?

Moderator: Certainly. At this time, we'll be conducting a question and answer session. If you have any questions or comments, please press *1 on your phone at this time. We ask that while posing your question, you please pick up your handset if listening on speakerphone to provide optimum sound quality. One moment while we poll for questions. Your first question for today is coming from Ian. Ian, your line is live.

Ian: Hi. So, I recognize that it's self-serving for the folks that installed these cables to be against remediation. But I guess how—it just strikes me that pulling a cable, dragging a cable off the bottom of Lake Tahoe is probably going to release a lot more lead into that environment. Is that, so is that actual—are they just going to yank it out of there? Or how, how do you go about removing that such that you're not really exacerbating the problem? And can you sort of extrapolate that to remediation costs elsewhere?

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William Verick: Yeah, so these cables, the ones that, unlike Tahoe—and I would think that most of the buried cables that have lead in them—what they are is, there is a lead pipe that's about two inches in diameter. The walls of it are about a quarter-inch thick. And running through that are these pairs of these thin wires that are copper wires, that are insulated. And they're twisted, and they go through, and then around that is like some kind of like a tar, bituminous-like sealant. And then on top of that—and that's, and that's like half an inch thick. And then on top of that are these quarter-inch steel rods. And you can see them in some of the pictures in, from the Wall Street Journal's article. And those wrap around the outside, and they're, you know, they're a quarter-inch in diameter, so they don't just rust out and fall apart. They're, they're actually in, in fairly good condition. And those are on the outside of, of that, so that, they're also protecting the cable from, you know, most of the kind of insults that it might get. And then, on top of that is burlap soaked in bitumens like tar, tar-soaked burlap to try to keep the water from getting in. But that, that stuff is falling apart. And, when you pull the cable, when you manipulate the cable, it's not going to wind up causing that much lead to come out. And, you know, what AT&T had to do for, to get the permit to take the cable out of Lake Tahoe, they had to have a doc—they had to put together a document that showed basically, like every 100 feet, what they were going to be doing over eight miles, and how they were going to be lifting it up very carefully, and then get it, once it's on board a ship, cutting it. And so, none of the cuttings are falling into the lake, and all the measures that they're having to do to take that. And then when the boat gets really loaded, then that's transferred, you know, to a barge that takes it to the dock. So, they're being very careful. And when it's on land, it's even a lot easier, I think. You just—they're not buried that deep, and you dig around them, and you lift them up, and you cut them. And most of them, I suspect, are along public right-of-ways, public thoroughfares. So, along Highway 101 in California, along I-5, along Highway 99, along railroad right-of-ways, because, you know, that's just, just makes sense that they would put it there rather than having to negotiate with individual property owners to run it across their property.

Moderator: Your next question for today is coming from Louis. Louis, your line is live.

Louis: Hi, thank you. I just wanted to know if you had any thoughts on how this could either expand or be limited because, I mean, a lot of this stuff was laid in the, you know, '30s, or, I mean, in theory, the original American Bell, I think was founded in the late 1800s. And then it's been, you know, broken up and turned into a lot of different things over the years. How does that, you know, how does that kind of translate into the modern incarnation of AT&T or, you know, any other kind of telecom carriers? Wouldn't at some point there be—well, I guess I'll just leave the question at that. Thanks.

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William Verick: Yeah, the, obviously, the age of the cables and where they were put does—would tend to limit the personal injury liability that AT&T may have been responsible for because statute of limitations are like a year, three years, maybe. And the real big exposures from these cables were caused to the people who were installing them and to their families. And so that's not really happening anymore. But if the cables are bleeding lead out into the environment, they are an imminent and substantial endangerment to the environment. And to that extent, there is no—under RCRA, there is no statute of limitations. And under CERCLA, you can go after people who, you know, three ownerships back, you can go after them. You can, you know, you can get anybody who was involved, anybody who owned the land, even for a while and then sold it, all the people who helped bring the lead to the place, the people who installed it, the people who abandoned it, the people who owned it. And so, to the extent that government is going to be—have an appetite for doing something like that, well, that remains to be seen. I think whether, yeah, I just—I'll be interested to see if the government wants to do something about that. But if they wanted to, you know, the legal theory is there. You know, whether a judge, even though the law may be clear, would want to, you know, subject AT&T to that kind of financial pain and anxiety, that remains to be seen. Judges tend to be from the same class as the people who are the management of companies like AT&T. And they have, you know, the same kind of ideology and values as those people do. So, they tend to identify with them much more than somebody who's a worker or somebody like that who would get exposed. It's not that big a deal to them. Their kids aren't going to get exposed.

Moderator: Your next question for today is coming from Phillip. Phillip, your line is live.

Phillip: Great, thank you. Yeah, my question was, obviously, in the specific case you're talking about, it was a lead-screened cable. But, you know, we've got a legacy of all sorts of telecommunications cables, you know, plastics, PTFVs, petroleum jelly, all sorts of other, you know, less serious contaminants. But the general telco strategy has been, you know, where it's inconvenient or expensive to remove, they've done exactly what AT&T did in the situation you're talking about, which is just they essentially abandoned the asset in place. Do you think that these other materials, and that general strategy, will come under broader threat as a result of the Journal's campaign?

William Verick: You mean other, other materials like fiberoptic cables and things like that?

Phillip: No, other materials in abandoned—so these are the old copper cables that are being replaced by fiber. So, there are other less hazardous materials in those cables. And then also, just as a result of that, the general strategy of, you know, cutting the

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ends of the cable and just abandoning it in place. Do you think that'll become more difficult for the telecommunications players as a result of the Journal's campaign?

William Verick: Huh. I don't know if it will become more difficult. My experience is that the real money to be made by private lawyers and by private plaintiffs on this is in personal injury. And personal injury cases to be brought would be very difficult. And to bring a case to force an industry like the, like the telecommunications industry to dig up toxic stuff that they've buried, you know, that's a public interest kind of case. It's not a case—you know, you can get, there's a fee shift, there are fee shifting statutes, so lawyers can get paid fees, but they're not going to get like one third of some giant, you know, settlement that's going to be done. And so, the kind of law firms that, you know, that are, that practice in the environmental field that are similar to the securities litigation folks like Bill Lerach used to be, and Elizabeth Cabraser and people like that, they're—they don't do these kinds of cases. They don't do cleanup cases. It's a public interest thing, and so it's a much smaller and less well-financed group of private lawyers who are, like me, who are doing it. And it's—because you're not going to become a millionaire doing this. You get paid, you know, what your going hourly rate would be times the number of hours you've worked if you win, and that's it. And so, it's people like us and public agencies that will be doing it. And the public agencies are not very well-financed anymore to do this kind of litigation. They just—and the people who work from them, for them, the public agencies, are somewhat demoralized, because of the number of times that they've worked up cases that they wanted to bring and their bosses have told them that they can't do it. And so, there's not a lot of, there's not a lot of—in my opinion, there's not a lot of pressure on agencies to do anything about this. And there's and they're not inclined to want to do anything about it. They don't like to be told about contamination. They don't want to hear about it. And, you know, there's always going to be some district attorneys out there, maybe an attorney general in one or two states that want to make a name for themselves and really are concerned about the environment who might bring something. But I don't think there's going to be a rush, a flood of public interest lawyers or public agencies that are going to be jumping on a bandwagon and trying to flog AT&T.

Moderator: Your next question is coming from Michael. Michael, your line is live.

Michael: You kind of addressed the question in what you just said in terms of maybe public agencies are hesitant to bring action quickly to AT&T, but what do you think AT&T and, like, the Verizons of the world are doing, you know, right now? Like, you know, the article was pretty damning. Do you think that it's going to change anything about how they spend money or do business in the near-term? Or is it going to be, like, a non-event in terms of how they run their businesses today?

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William Verick: You mean beyond the cables? Are you asking me whether I think that the embarrassment that they were caused by the Wall Street Journal article will make them be more environmentally sensitive? I doubt that. You know, one of the things that I saw in the Wall Street Journal article was that AT&T—it looked like AT&T was, or one of their executives was actually floating an idea for how it could be dealt with, that the government would pay for a bunch of the cleanup, and they would pay for some of it, and some of their other contractors and stuff, people who were involved, would come up with some money too and they would, you know, reach some kind of deal that would take care of everything forever. And, you know, just like the, the oxycodone litigation let the Sackler family off the hook, all those guys will be let off the hook too. And I think that that's what, I think that that's what AT&T is signaling that they would be willing to go along with.

Michael: Right. So, it's not like they're preparing for, like, a huge settlement cost, or if they lose a lawsuit, it's going to cost a lot of money that could affect their, like, near term spending plans elsewhere in the business. They probably think that there's a way to solve this issue without impacting the rest of their business, or how they're planning to, like, spend.

William Verick: Yeah, well, AT&T can afford, you know, as many lawyers as it wants until the cows come home. And they can delay this for 10,15 years before they have to do anything other than, you know, pay a bunch of lawyers. And, you know, the people that they're hiring are costing them \$800 to \$1,000 an hour for people who are partners. And, you know, it'll cost them, it could cost them, you know, \$10, \$15 million a year. But that's nothing for AT&T, they'll just say to themselves, we need 10 to 15 more, million more dollars per year, let's just jack up the phone, the, the cell phone rates, and they basically have a monopoly. So why can't, why wouldn't they do something like that? I think they're more likely to do that if the government insists on anything that's going to cost them a lot of money. They'll just delay it for as long as, as long as they can. And that can be for a long, long time.

Michael: Got it. That's helpful. Thanks.

Alec Vaughan: Bill, I've got a number of quick questions sent to my inbox here that I want to try to squeeze in as many as we can before our time expires at 1:00 pm. So, I'll just go ahead and read off one by one, and you can give a quick reaction to. So, first one is just seeking to clarify what happens if a company is sued and declares bankruptcy. And if the company emerges from bankruptcy, does liability stay with that emerged company?

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William Verick: Well, it all depends on what the bankruptcy court orders. But generally, you know, ever since John, Johns Manville sort of set the, the standard for that, you know, when, with the asbestos litigation. They declared bankruptcy, and then they got off the hook. They didn't have to pay anything more. They came out of bankruptcy, chapter 7—I mean, chapter 11, I believe, and, you know, stayed in business. So that can happen. Exide wound up going belly up because they had smelters like, like 15 states, it wasn't just California. They went belly up and they were just, they went—I think they went through chapter 7 and they were liquidated, and ceased to be a business entity anymore. So, it you know, it depends, and it depends on the bankruptcy trustee, and it depends on the bankruptcy judge, too.

Alec Vaughan: Got it, and then I'll try to fit in one more quick one. And it's just a question about the precedent of lead pipes which are continuing to be used fairly broadly, even for drinking water, and why are the telco cables going to result in a large liability when lead pipes are still pretty fairly broadly deployed?

William Verick: Well, the only reason is that, I mean, I think that the personal injury that's caused by lead pipes, what happened to the kids in Flint, just alone, if, you know, could put any, even maybe even put AT&T out of business, what they could recover for what was done to them. That generally, you know, all lead water pipes are way worse for the environment than, than what AT&T's got going because people are drinking the water that's flowing through them. And they're sitting in the soil too, just like AT&T's lead pipes but people are drinking from them. So, but the difference is that AT&T is a private company and it's like one of the deepest pockets on the entire planet. You know, the city of Flint—what the city of Flint is, you know, probably has a budget the size of what AT&T spends on their Christmas party.

Alec Vaughan: Yeah, yeah. Understood. And why would you—this is another email question that we've gotten.—why would you suspect that EPA would want to bring this kind of a case even to begin with? Or is that the sense that you're getting, that EPA does want to bring a case like this?

William Verick: Well, I mean, I can't speak of EPA like it's a person. It's a, it's an organization that has its own internal politics, and it's governed by external politics as well. You know, Donald Trump's EPA is way different from Joe Biden's EPA. And the people who are the political appointees, they're all very sensitive to, you know, their funding base, their funder, the funder base of their bosses. And AT&T, I'm sure, is smart enough to give money to both parties. So, I mean, let's face it. That's, that's how politics works in America. And the EPA is a political animal. And the people who get hired there

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get hired for certain reasons. And the people who have—who are the political appointees in there are, are appointed there for certain reasons. And one of them is that they certainly have to take into consideration anything that a major company like AT&T thinks about something that they're about to do. And so, there may be people in positions of power in the EPA that want to do it, that want to do something like that and they might actually do something like that. But—so you have to, you have to, if you want to figure out what AT&T, what the EPA is likely to do, you actually have to look at who's in charge, and who's in charge of the divisions that would be involved in this kind of an enforcement action, and what their track record is. And I haven't done that work on this. But that's what I would do if I was trying to figure that out.

Alec Vaughan: Yeah, I think you made a lot of really, really great points there, Bill. We've got, we've got just one more question. I know you've been very generous with your time today. So, hopefully, we can squeeze this last one in quickly. And I think this is a good one. So, when would EPA kind of require this cleanup under certain circumstances, right? So, for example, if the cable is in a lake or in a water area and clearly leaking, then you'd have to clean it up. But if a cable is just buried somewhere, and abandoned, and not near any drinking water, then what would EPA do with that? I guess, like, what is kind of the range of mandates that EPA can, can offer here?

William Verick: Yeah, well, AT&T could, I mean, EPA could do, could make them clean it up even when it's not, you know, leaking in a lake, if they wanted to. But obviously, no—you know, EPA or none of the state agencies that are responsible for this kind of thing have the budget or the inclination to be hard-ass about this. And so, they're more likely to respond to public pressure to do something. And that's going to be, you know, that's going to be, that's going to depend on the location, who is being exposed and hurt by this. You know, if it was poisoning executives on a golf course, it would be, you know, it would be more likely to result in them doing something about it than if it's just buried in some residential neighborhood and nobody's really getting exposed to it. And they're not going to—I would bet my eye teeth that they're not going to order AT&T to rip up every, you know, every mile of this cable nationwide. That's just not going to happen. And private enforcers like me, we're only going to bring the best cases that we can because they're plenty of them out there, and, you know, it's not something's that's subject to like cookie cutter cases that you can do everywhere. So, I suspect that it's not going to be a major drain on AT&T's finances. I think it's something that they can handle, and they have the if—they have the political skills and connections to shape the various outcomes that are likely to happen.

Alec Vaughan: Got it, got it. Perfect. Well, that's the end of our Q&A session and the end of our conference call. Bill, I want to thank you again so much for hopping on the

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phone with us today. We really appreciate you taking the time. And for everyone else who's on the phone, thank you so much for joining us today. This has been great. So, hope everyone has a great day and take care.

William Verick: Thank you. Good-bye.

Moderator: Thank you. This concludes today's conference call. You may disconnect your phone lines at this time and have a wonderful day. Thank you for your participation.

[END FILE]

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I, Brian Echon, certify, under the laws of the State of California, County of Los Angeles, that I am a professional transcriber/reviewer and I am one of two transcribers who transcribed and reviewed the digital audio file entitled: "Lead Contamination Conference Call - 7-18-23" to the best of my ability. I am a subcontractor for Keystrokes, a transcription and translation company located in Santa Monica, California.

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Date: _____

_____

EXHIBIT 2

Lead Cable Investigation

June 30, 2023

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Lead Cable Investigation

June 30, 2023

INTRODUCTION

The Environmental Defense Fund (EDF) seeks to understand the extent to which telecom and power cables running through rivers, streams, and lakes that serve as drinking water sources may have been constructed using lead pipe and which may now pose a public health risk that needs to be addressed. Marine Taxonomic Services, Ltd. (MTS) is a marine and aquatic consulting firm that has expertise and experience conducting environmental investigations in bodies of water. MTS shares EDF's interest in protecting public health should a risk be identified, and therefore, an interest in making any finding from its work publicly available.

Understanding potential sources of lead in drinking water is critical to the protection of public health. The Environmental Protection Agency (EPA) has established an action level of lead in drinking water. The action level is 15 micrograms per liter (ug/L) (CDC 2019). Lead is widely understood as a public health threat with neurological, reproductive, and hypertensive implications for impacted individuals (CDC 2019). The National Toxicology Program (CDC 2012) concluded that there was sufficient evidence for adverse health effects in children and adults at blood lead levels of less than 5 micrograms per deciliter ($\mu\text{g/dL}$) of blood (CDC 2012). However, no blood lead threshold for adverse health effects has been identified in children, and no BLL above zero is free of all risk (CDC 2019).

In 2022, the Wall Street Journal reached out to MTS as part of reporting for an article on cables. EDF contracted with MTS and funded an initial study to validate the locations of abandoned cables and perform environmental sampling at locations adjacent to the cables. MTS and the WSJ visited the cable locations that were identified by the WSJ. MTS, alongside WSJ reporters, investigated numerous locations in six regions across the U.S, where the WSJ provided permit records showing historical cable locations within rivers, streams, and lakes. Verification of permit records included determining if cables were present at those locations and visually assessing the composition of telecom and power cables. Screening samples of water, sediment, and soil in the immediate vicinity were collected and tested for lead. Samples from the surface of the lead cable were collected, when present, to confirm its identity.

METHODS

Six general regions were chosen for investigations. In order of investigation, these include the South (Louisiana), Midwest (Michigan), Northwest (Oregon and Idaho), Appalachia (Pennsylvania and West Virginia), Mid-Atlantic (New Jersey, and New York), and West (California).

The WSJ identified cable locations that had been permitted with various state and federal offices, resulting in sixteen states that were of interest to the project. The WSJ narrowed down thousands of records and identified specific communities where lead sheathed telecommunications cables were most likely to remain in place based on historical permits, NOAA navigational charts, and the presence of geographic indicators. This resulted in the nine priority states discussed within this report. With guidance from EDF, MTS and WSJ reporters visited these locations. See Figure 1 for an overview map of the nine states that were investigated. As the investigative team approached each location within the nine states, points of interest were identified, such as signs, manholes, utility poles with cables, lead splice box, or other indicators that would help to identify the presence of a lead sheathed cable. These were recorded as points of interest in the database. One location could contain multiple points of interest based on field observations. See Figure 2, for a generalized map of the points of interest where data was recorded for each of the nine priority states.

The project goal was to document the presence and condition of lead sheathed cables within the selected regions. Additionally, screened samples of water, sediment, soil, and cable were collected within and adjacent to water bodies where lead-containing cables were identified. The samples were provided to analytical laboratories to determine the lead content. WSJ selected the laboratory and paid for the analysis. While MTS was responsible for implementing the field investigations and sampling, MTS was not responsible for making any determinations relative to the source of the lead in any given sample.

Figure 1. Overview map of states based on historical permit data collected and provided by the Wall Street Journal.

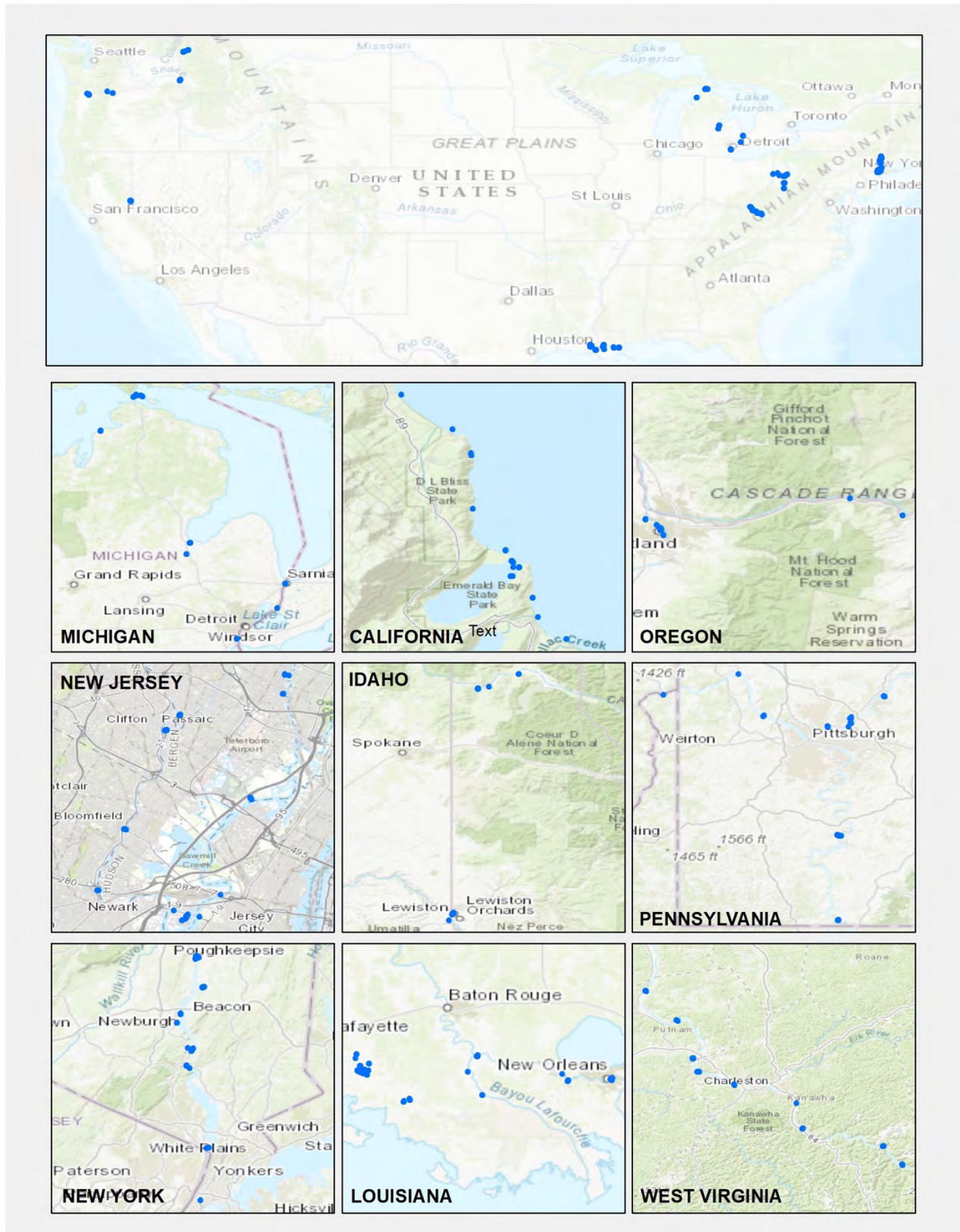


Figure 2 Overview map of the generalized points of interest investigated across the nine states selected by the Wall Street Journal, Marine Taxonomic Services, and Below the Blue 501(c)3. Project Funded by the Environmental Defense Fund. Map and data points provided by Below the Blue. June 2023.

MTS traveled to the agreed upon locations and surrounding communities with WSJ reporters to investigate the permit locations for presence of lead sheathed cables. Documentation as to the presence and condition of the lead sheathed cables was collected at each identified location using Fulcrum, data management software provided by Below the Blue 501(c)3, a not-for-profit organization.

MTS collected samples as identified under methods for both diver-assisted collections and surface collections. Sampling locations were chosen in part by their likelihood to show high lead levels. Chain of Custody (COC) forms were created for each sampling region and then shipped with samples via FedEx to Pace Analytical Laboratories (Pace) out of Huntersville, NC. The analytical lab was arranged and paid for by the WSJ.

MTS collected samples of water, soil, and other materials with the objective of screening for lead. Additional samples would need to be collected to assess any associated risks in a subsequent effort. Below is a summary of the specific sample collection methods.

Water Sample Collection Methods

Diver Methods

In cases where water samples were collected near cables and the cable was too deep to be accessed from the surface, divers collected water samples with a new plastic syringe. Once the sampling location was identified, the dive tender/deckhand put on a pair of new nitrile gloves and the diver put on two pairs of gloves, one on top of the other. The dive tender/deckhand removed the plastic syringe from its sealed wrapper. The diver then removed a pair of gloves, ensuring there was no contamination from contact with other items, such as the boat, between the time of entering the water and locating the cable and returning to the vessel or shore for the sampling syringe.

After receiving the unwrapped syringe from the dive tender/deckhand, the diver would descend to relocate the cable. The diver approached the sampling location slowly and with careful buoyancy control to avoid disturbing the bottom when approaching the sampling location. The diver then collected water one centimeter away from the cable by drawing on the syringe. The diver used a gloved finger to then cover the tip of the syringe and surfaced. At the surface, the syringe was provided to the dive tender/deckhand. If the dive tender/deckhand contacted any other items between the time of handing the syringe to the diver, the dive tender/deckhand would change gloves. Once the syringe was provided to the dive tender/deckhand, the dive tender/deckhand opened a new plastic container as provided by the analytical laboratory and emptied the contents of the syringe into the container. The lid of the container was held while transferring the sample. The lid was then replaced, and the sample was stored with other samples collected on the same day in a cooler.

Surface Collection Methods

Some samples were collected from the surface of water bodies. In these instances, nitrile gloves were put on by the sampling team. One team member opened the plastic container provided by the analytical laboratory and removed the lid. The lid was held during sampling as opposed to being set down. The container was then inverted and placed under water so it would fill with water when turned upside down to release the air. When the container was within one centimeter from the cable, the team member turned the opening toward the surface and brought out of the water. The lid was then replaced, and the sample put into a cooler for storage. All coolers used for storage were cleaned with Liquinox and rinsed with deionized water prior to being used to store samples. During sampling from shore, care was taken to minimize sediment disturbance. Gloves were changed whenever multiple samples were collected.

Sediment and Soil Collection Methods

Diver Methods

In cases where sediment samples were collected underwater, divers collected samples with a stainless scoop at locations touching and up to 15 centimeters away from the cable and at various locations away from the cable.

Once the sampling location was identified, the dive tender/deckhand put on a pair of new nitrile gloves and the divers put on two pairs of gloves, one on top of the other. After locating the cable and sampling site the diver then removed a pair of gloves, to ensure there was no contamination from contact with other items, such as the boat, between the time of entering the water and locating the cable and returning to the vessel or shore for the equipment. The dive tender/deckhand handed the divers everything needed for sampling once they were ready to collect the actual sample.

One team member/diver opened the plastic Ziplock bag and held it open underwater for the sampling diver who used a site-washed (using Liquinox) stainless scoop to fill the bag with sampled sediment. The diver scooped sediment very slowly and moved the scoop very slowly to the bag, so no sediment was washed away during the process. The sample bag was sealed underwater, and everything was brought to the surface and handed to dive tender/deckhand on a vessel or shore. The bag was labeled externally, doubled bagged, and then the sample was placed into a cooler for storage. All coolers used for storage were cleaned with Liquinox and rinsed with deionized water prior to being used to store samples. Gloves were changed whenever multiple samples were collected.

Surface Collection Methods

Sediment and soil samples were collected using a stainless-steel scoop at locations touching and up to 15 centimeters away from the cable and at various locations away from the cable. In these instances, nitrile gloves were put on by the sampling team. One team member opened the plastic Ziplock bag and held it open for the sampler who used a site-washed (using Liquinox) stainless scoop to fill the bag with sampled sediment. The sample was labeled externally, doubled bagged, and then the sample was placed into a cooler for storage. All coolers used for storage were cleaned with Liquinox and rinsed with deionized water prior to being used to store samples. Gloves were changed whenever multiple samples were collected.

Cable Collection Methods

In addition to water and sediment samples, samples were taken from the investigated cables directly to determine if the material was lead. These samples were collected using a stainless-steel scraper at locations where cables were deemed abandoned. Cables were determined to be abandoned in place through visual methods such as identifying severed ends or observing signs of obvious disrepair.

Diver Methods

When collected in the water, nitrile gloves were put on by the sampling team. Divers collected samples with a stainless scraper directly from the lead sheathing around the cables.

Once the sampling location was identified, the dive tender/deckhand put on a pair of new nitrile gloves and the divers put on two pairs of gloves, one on top of the other. After locating the cable and sampling site the diver then removed a pair of gloves to ensure there was no contamination from contact with other items, such as the boat, between the time of entering the water, locating the cable, and returning to the vessel or shore for the equipment. The dive tender/deckhand handed the divers everything needed for sampling once they were ready to collect the actual sample.

One team member/diver opened the plastic Ziplock bag and held it open directly next to the cable underwater for the sampling diver who used a site-washed stainless scraper to scrap a few small pieces of lead from the cable sheathing into the bag. The sample bag was sealed underwater, and everything was brought to the surface and handed to staff on a vessel or shore. The bag was labeled externally, doubled bagged, and then the sample was placed into a cooler for storage. All coolers used for storage were cleaned with Liquinox and rinsed with deionized water prior to being used to store samples. Gloves were changed whenever multiple samples were collected.

Surface Collection Methods

When collected on land, nitrile gloves were put on by the sampling team. One team member opened the plastic Ziplock bag and held it open for the sampler who used a stainless scraper to put a few scraps directly from the cable into the bag. The sample was labeled externally, doubled bagged, and then the sample was placed into a cooler for storage. All coolers used for storage were cleaned with Liquinox and rinsed with deionized water prior to being used to store samples. Gloves were changed whenever multiple samples were collected.

TYPICAL CABLE COMPOSITION

A typical telecom line sheathed in a lead pipe consists of numerous layers of varying substances. From the 1800's into the 1960's, they typically were constructed as follows:

The outer most layer appears to be a petroleum-based tar-impregnated fiber or asphaltic material. The layer below that is composed of ¼" thick steel rods twisted around the cable core. There are typically numerous layers of tar-impregnated twine or asphaltic material under the steel rods. The core is separated from these outer protective layers with a lead pipe that is roughly 1/5" thick. Inside the lead pipe, the core is made up of copper wire pairs wrapped in paper insulation. Each of the paper-wrapped wire pairs is bundled with a string.

MTS dissected a piece of lead-sheathed 24 pair telecom cable from Emerald Bay in Lake Tahoe to determine the above description and evaluated the relative composition per foot of cable. The lead pipe in this cable was 0.188-inch thick. The below table provides the composition and extrapolates the weight of the various materials per mile (Table 1).

Table 1. Typical Cable composition in pounds per foot and per mile of cable.

Material	pounds/foot	pounds/mile
Petroleum-based, tar-impregnated fiber or twine	0.71	3,724.9
Steel	4.15	21,916.6
Lead	3.39	17,898.3
Paper	0.21	1,110.0
String	0.01	27.9
Copper	0.77	4,078.8

Lead sheathed power cables had similar construction. The primary difference is that the copper wires inside the lead pipe are insulated with a rubber-like material. All telecom lines were continuously charged with air internally to prevent water intrusion and facilitate finding cracks in the lead pipe. If a system had cracks and was failing while pressurized, air would leak from that location and be visible in the water column or from the surface. Abandoned cables that do not have operating compressed air systems are typically inundated with water.

RESULTS

Each of the sections below provide the results of site visits within each of the six regions that were targeted for investigation. In order of investigation, those regions include the South (Louisiana), Midwest (Michigan), Northwest (Oregon and Idaho), Appalachia (Pennsylvania and West Virginia), Mid-Atlantic (New Jersey, and New York), and West (California).

South Region

Louisiana

Louisiana was the only state investigated within the South region. MTS visited a total of twenty-six different locations across the state of Louisiana. A total of sixty-four points of interest containing GPS data were investigated and recorded while screening the twenty-six locations. The locations generally occurred along the Atchafalaya River, Bayou Boeuf, Bayou Lafourche, Bayou Teche and Mississippi River. These locations were visited over a period of three field days from June 3-5, 2022.

Louisiana had the most data points collected, only a few are highlighted in this summary report as organized by water body below. A complete table of locations and identified points of interest are provided within each of the daily data collection reports referenced below. The daily reports are provided electronically with this document. The daily data collection reports also help to understand the initial naming conventions used for the points of interest highlighted.

Eighteen points of interest were recorded where visible lead sheathed cables were noted; of those eighteen points, six points contained lead sheathed power cables. Eight points of interest were recorded with Bell Systems manholes with a total of ten manholes and two possible vault locations. The remaining thirty-six points of interest consisted of water intake locations, signs, and old telephone poles. Various types of insignia mentioned above indicate that Southern Bell Telephone, South Central, AT&T and Bell Systems are the dominant companies represented in the area. Additional details are provided for each of the areas listed below. Coordinates for each site and point of interest can be found in the following documents:

20220603_Louisiana Data Collection – Final

20220604_Louisiana Data Collection – Final

20220605_Louisiana Data Collection – Final

Bayou Lafourche

Two locations with three points of interest along the Bayou Lafourche contained old telephone poles, the remnants of Bell Cable signs, ground markers and plastic corrugated hose where cables may have been (Figure 3(A-B)). While there were no visible cables found at these locations, there was some evidence suggesting these old cables may still be in use. However, we arrived at this location at night and the area was heavily overgrown. The investigative team was only able to survey two points on the Bayou Lafourche due to time.

Bayou Teche

Twelve points of interest along the Bayou Teche contained visible lead sheathed cables, with both power and telecommunication cables at various locations. BT 1.1 was the first point of interest at this location; five feet of steel wire were observed protruding from the ground with a portion of damaged, bare lead sheathed cable at the base (Figure 4(C)). Further along the Bayou Teche, BT 16.1 illustrated a sort of debris field that would end up characterizing much of the area, a combination of new and old materials left in varying conditions and states of use (Figure 4(D)). BT 17.1 contained four lead sheathed cables underneath the bridge: two power cables and one telecommunication cable. Sections of bare lead were observed near the water's surface as seen in Figure 4(E). Along the E. Bridge Street bridge in the historic district of St. Martinville, LA, BT 24.1 contained the first leaded splice box observed. There are two lead sheathed cables coming from the bottom of the splice box, leading into the ground as seen in Figure 4(F). This splice box was located along the sidewalk going into town and a larger picture view can be seen in Figure 5(G). This location also had a Bell Systems manhole. In Franklin, LA at Location BT 26.2, another exposed lead splice box and set of cables were observed in a small muddy duck pond in a public park with direct drainage into the Bayou Teche (Figure 5(H)).

Mississippi River

The team worked along the Mississippi River into New Orleans, where there is a mix of revitalization, modified shorelines, and areas of abandoned debris. MISS 2.1 is near the Poydras Station, an area revitalized for tourism. This point of interest contained three Bell Systems manholes and a vault which is likely a hub and splice location for multiple cables. The door behind the manholes seen in Figure 6(I) is marked with an AT&T sign suggesting it is the utility building where cables in the area would converge. Due to the heavy revitalization in and around the boardwalk area, this site requires boat access to identify whether the submarine cables leading into the vault remain in place and in use. MISS 3.1 is an area along a biking path and greenway and is also an abandoned cable location (Figure 6(J) and Figure 7(K)). There is a homeless encampment adjacent to this cable location. One local, who has lived there for nearly a decade said that he has seen people cut pieces of the cable at extreme low water to sell as scrap metal. There is visible evidence of this seen in Figure 7(K-L). While this site is accessible from land, it would require a boat and diving equipment for further observations. The final location highlighted here is in Donaldsonville, LA. MISS 12 is comprised of four points of interest; 12.1, 12.2, 12.3 and 12.4. The first point of interest contains an exposed leaded splice box with an old air test line that appears to still be pressurized with newer connected tubing, suggesting it may still be in use; MISS 12.1 (Figure 8(M)). At that same point, on the opposite side of the pictured telephone pole, is a cut lead sheathed cable (Figure 8(N)). The second point of interest within Location 12 is 12.3, which contains a damaged lead splice box and five lead sheathed cables at the base of an old, cut telephone pole (Figure 9). This splice box and collection of lead sheathed cables are heavily damaged and appear to be disconnected from the infrastructure observed at 12.1.

Analytical Results by Sample

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 2. Summary of sample types and locations for Louisiana.

State Summary & Recommendations

Overall, the findings in Louisiana were robust. It is recommended that a more in-depth survey of the state be performed. There are locations where cables appear to be still in use, as such it is recommended to conduct additional studies on the implications of exposed, bare lead in these waterways. It is likely that more lead sheathed cables would be discovered if more of the locations provided by the WSJ were investigated.

Table 2. Summary of sample types and locations for Louisiana.

Louisiana (18 Sites with Samples)							
Atchafalaya River, Bayou Teche and Mississippi River							
General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
BL 2.1	5-Jun-2022	0	2	0	0	2	W
BL 2.2	5-Jun-2022	0	2	0	0	2	W
BT 1.1	3-Jun-2022	1	3	1	2	7	SWMO
BT 15.1	3-Jun-2022	0	2	0	0	2	W
BT 17.1 (17.2 and 17.4)	3-Jun-2022	1	4	1	0	6	SWM
BT 24.1	3-Jun-2022	0	0	1	0	1	M
BT 25.1	3-Jun-2022	0	2	0	0	2	W
BT 26.2 (26.3 and 26.4)	4-Jun-2022	1	6	1	0	8	SWM
BT 27.1	4-Jun-2022	0	2	0	0	2	W
MISS 3.1	4-Jun-2022	1	2	1	0	4	SWM
MISS 1.4	5-Jun-2022	0	0	0	1	1	O
MISS 5.1	5-Jun-2022	0	2	0	0	2	W
MISS 6.1	5-Jun-2022	0	2	0	0	2	W
MISS 7.1	5-Jun-2022	0	2	0	0	2	W
MISS 12.1	5-Jun-2022	1	0	1	0	2	SM
MISS 12.3	5-Jun-2022	1	0	1	0	2	SM
MISS 12.4	5-Jun-2022	1	0	1	1	3	SM
MISS 13.1	5-Jun-2022	0	2	0	0	2	W
Totals for Louisiana		7	33	8	4	52	

Notes for Louisiana:

52 Total Samples collected from 18 Sites

BT 1.1 (O) are pieces of cable.

BT 17.1, 17.2 and 17.4 samples are all under Location 17.1, for a total of 6 samples.

BT 26.2, 26.3 and 26.4 samples are all under Location 26.2, for a total of 8 samples.

MISS 1.4 (O) is a piece of cable.

MISS 12.4 (O) is a piece of cable.

Bold line items include a metal sample.



(A) Bell Systems sign for underground Telephone Cables. BL 2.1. Labadieville, Louisiana. June 2022.



(B) Old telephone pole with cable guard and old conduit where a cable would have been. There is currently corrugated plastic hose behind the guard and in the steel pipe, but no visible cable. BL 2.2. Labadieville, Louisiana. June 2022.

Figure 3 Photos. Louisiana. (A) Point of Interest: BL 2.1. (B) Point of Interest BL 2.2.



(C) Remnants of bare lead sheathed cable and steel wire below the Bridge Street Bridge. BT 1.1. June 2022, New Iberia, Louisiana.



(D) Equipment debris field left by workers near the N Lewis Street Bridge. BT 16.1 June 2022, New Iberia, Louisiana.



(E) Rd. 320 southeast of New Iberia, LA. Cluster of lead sheathed cables under the Oliver Bridge. BT 17.1. June 2022, New Iberia, Louisiana.



(F) Up close photo of bare lead sheathed cables coming from the bottom of a lead splice box (upper left corner of photo). BT 24.1. June 2022, St. Martinville, Louisiana.

Figure 4. Photos. Louisiana continued. (C) Point of interest BT 1.1. (D) Point of Interest BT 16.2. (E) Point of Interest BT 17.1. (F) Point of Interest BT 24.1.



(G) Bare lead sheathed cables going into a lead splice box near the sidewalk leading into the Historical District. BT 24.1. June 2022, St Martinville, Louisiana.



(H) Exposed lead splice box with attached cables and drainage into the Bayou Teche. BT 26.2. June 2022, Franklin, Louisiana.

Figure 5. Photos. Louisiana continued. (G) Point of Interest: BT 24.1. (H) Point of Interest: BT 26.5.



(I) New Orleans, LA. MISS 2.1 with Bell Systems manholes, vault, and Utility Building. This is a likely hub and splice area for cables, both old and new. June 2022.



(J) New Orleans, LA. MISS 3.1. is an abandoned collection of cables.

Figure 6. Photos. Louisiana continued. (I) Point of Interest: MISS 2.1. (J) Point of Interest: MISS 3.1.



(K) New Orleans, LA. MISS 3.1. The small rectangle on the left is the passthrough for utility cables. June 2022.



(L) New Orleans, LA. MISS 3.1. Remnants of outer steel wire from a lead sheathed cable. Evidence that parts of the cable may have been scrapped for money. Locals told us that that was done to these cables.

Figure 7. Photos. Louisiana continued. (K-L) Point of Interest: MISS 3.1.



(M) Donaldsonville, LA. Location MISS 12.1. Exposed leaded splice box that appears to still be connected to an air test line. See photo (L) for the abandoned cable just the other side of the splice box. June 2022,



(N) Donaldsonville, LA. Location MISS 12.1. Close up of lead sheathed cable next to lead splice box seen in (K). June 2022.

Figure 8 Photos. Louisiana continued. (M) Point of Interest: MISS 12.1. (N) Point of Interest: MISS 12.1.



Figure 9 Photos. Louisiana continued. Damaged and abandoned leaded splice box and collection of five lead sheathed cables. MISS 12.3. June 2022, Donaldsonville, Louisiana.

Midwest Region

Michigan

Michigan was the only state investigated within the Midwest region. MTS screened a total of seventeen different locations across the state of Michigan. A total of thirty-one points of interest containing GPS data were collected while screening the seventeen locations. The locations generally occurred along the Black River, Detroit River, Lake Huron (Saginaw River), Lake Michigan, St. Clair River, and the Straits of Mackinac. These locations were visited over a period of three field days from July 25- 27, 2022.

Two points of interest were collected along the Detroit River where visible lead sheathed cables were noted. Fourteen points of interest were recorded with AT&T or Bell Systems manholes with a total of twenty-four manholes; additional investigation would be required to determine if lead sheathed cables could be found at those locations.

One point of interest contained a small lead sheathed test line that was strung along the outside of a building tracking a conduit. (Saginaw River). Additional details are provided for each of the areas listed below. Coordinates for each site and point of interest can be found in the following documents:

20220725 Michigan Data Collection – Final

20220726 Michigan Data Collection – Final

20220727 Michigan Data Collection – Final

Black River, Lake Huron (Saginaw River), and St. Clair River

These areas contained mostly AT&T and Bell Systems manholes totaling, ten points of interest with sixteen manholes, one vault and an old telephone pole. Location, LH 2, which includes points of interest 2.1, 2.2 and 2.3; also had an above ground conduit route with a lead sheathed air test line. There were paint markings on the road indicating an AT&T corridor; this is likely an area of potential construction and would require future investigation (Figure 10A-B). For additional information, refer to details in the report titled “20220726 Michigan Data Collection – Final”. Location, LH 3 is the site of a 1920’s era Historical Telecommunications Building and two large Bell Systems manholes. This could be a communications hub for the area.

Lake Michigan (Lake Charlevoix) and Straits of Mackinac

The locations investigated in the Lake Michigan and Straits of Mackinac area had evidence of previously existing cables in utility corridors. This included old telephone poles, signage, and Bell Systems manhole covers. Much of this area has been revitalized and there is evidence to show newer lines and technologies are in place. Evidence of the newer infrastructure includes, new AT&T flagging, fiber optic signage, and newer manhole covers. While the investigation team did not see open evidence of abandoned infrastructure, it is possible some exist beyond what is accessible by public access (e.g., under manhole covers).

Detroit River

The only two locations in the screening areas contain visible lead sheathed cables along the Detroit River. At Location DR 1, there were seven cables along the shoreline and two Bell Systems manholes near the road (Figure 11(C-D)). The other location with a single cable hanging from the bridge and going into the water was found at site DR 2 (Figure 12(E-F)). The cable was cut and clearly abandoned in place. DR 3 was a sampled water intake location. For additional information, refer to details in the report titled “202207727 Michigan Data Collection – Final”.

Analytical Results

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 3. Summary of sample types and locations for Michigan.

State Summary & Recommendations

Overall, the findings in Michigan showed few visible lead sheathed cables with a high potential of buried cables in areas with significant manholes. This may indicate that additional cables could be identified with further investigation if access can be granted.

Table 3. Summary of sample types and locations for Michigan.**Michigan (3 Sites with Samples)**

Detroit River

General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
DR 1	27-Jul-2022	1	1	1	1	4	SWMO
DR 2	27-Jul-2022	0	1	0	0	1	W
DR 3	27-Jul-2022	0	1	0	0	1	W
Totals for Michigan		1	3	1	1	6	

Notes for Michigan:

6 Total Samples collected from 3 Sites

DR 1 (O) Sample is a piece of tar sheathing.

Bold line items include a metal sample.



(A) Paint Markings indicating an AT&T service corridor. The lead sheathed test line follows these markings along the brick building shown above. LH 2.2. July 2022, Bay City, MI.



(B) End of the lead sheathed test line shown in (A). LH 2.3. July 2022, Bay City, MI.

Figure 10 Photos. Michigan. (A) Point of Interest: LH 2.2. (B) Point of Interest: LH 2.3.



(C) Seven lead sheathed cables in the Detroit River. DR 1. July 2022, Trenton, MI.



(D) Lead sheathed cables from (C) continuing past the tree line. They are buried in the ground and run up the hill to a Bell Systems manhole. DR 1. July 2022, Trenton, MI.

Figure 11 Photos. Michigan continued. (C-D) Point of Interest: DR 1. (E) Point of Interest: DR 2.



(E) Lead sheathed cable along the Grosse Ile Parkway Bridge. The cable runs through the concrete and is cut just above the ledge. DR 2. Grosse Ile Township, MI



(F) Cut lead sheathed cable, referenced in (E). DR 2. Grosse Ile Township, MI.

Figure 12 Photos. Michigan continued. (E-F) Point of Interest: DR 2.

Northwest Region

Oregon

MTS screened a total of twelve different site locations across the state of Oregon and collected eighteen points of interest with GPS data. Investigation of locations along the Columbia River and the Willamette River occurred over a period of two field days from August 3-4, 2022. Eight points along the Willamette River contained approximately twenty-nine visible lead sheathed cables; one of those locations contains a cable likely from the Abernathy Bridge, which was not within the screened locations; two points of interest were recorded with Bell Systems or PTco manholes with a total of six manholes plus one vault; leaving the remaining points of interest being a combination of old telecommunication signage, old telephone poles, control locations and cable corridors where no cables were identified. Signs that remained standing within the cable corridors and those tacked into old telephone poles, are related to Pacific Northwest Bell, Western Union Telcom Co., and Bell Systems. Coordinates for each site and sample location can be found in the documents below.

20220803_Oregon Data Collection – Final

20220804_Oregon Data Collection – Final

Columbia River

There were two locations with three points of interest along the Columbia River. No visible lead sheathed cable was observed at these points, however, there was evidence of old telephone poles, Oregon Washington Telephone Company signage, and remnants of the outer steel layer of a lead sheathed cable.

Willamette River

There were seven locations along the Willamette River in Oregon. Nine points of interest were recorded along the Willamette River containing visible lead sheathed submarine cables in varied conditions. At low tide, with lower river levels, WR 1 can be seen on the shoreline protruding from the riverbed. This is a cut and abandoned lead sheathed cable on the east bank of the Willamette River near Ross Island (Figure 13(A)). Our team spoke with a homeless man living on a nearby boat who mentioned the cables being visible at different times during the year. The same location had a newer cut telecommunications cable which also had a thin lead sheathing. Near the Oregon Maritime Museum and Waterfront Park Trail, WR 2.2 contains eleven lead sheathed cables protruding from the wall and running into the Willamette River. The associated site WR 2, just over the railing has five Bell Systems manholes and what appears to be a large access vault (Figure 13(B-C)). Site WR 3 had a much older and smaller lead sheathed cable running just below an old wooden, Western Union Telecom Co. Sign just below the Morrison Bridge (Figure 13(D)). Underneath the West Burnside Bridge, site WR 5.1 had four lead sheathed cables that went submarine where the bridge opens. At the North Steel Bridge, point of interest, WR 6, is a collection of four lead sheathed cables that were observed chained up to the concrete footings, until going inside the footings near the street (Figure 14(E)). These were not visible at the southwest end of the bridge, which is also the northernmost end of Portland's Waterfront Park Trail and Greenway. As such, these cables are likely hidden within the new development. The NW Broadway Bridge, at point WR 7, contained a collection of six lead sheathed cables. These cables go submarine at the point the bridge opens. Some of these cables have been struck and damaged

by, passing boats, or floating debris in the river (Figure 14(F)). The final screened location WR 8, was an active construction site along the waterfront. There was limited access to the point of interest provided by the WSJ, however, the team observed a coiled-up, lead sheathed cable on the barge. After a brief discussion with the foreman, it was learned that this cable may have been pulled from the Abernathy Bridge south of Ross Island. This was not a location the team had time to investigate during this trip (Figure 14(G-H)).

Analytical Results

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 4. Summary of sample types and locations for Oregon.

State Summary & Recommendations

Overall, the findings in Oregon showed a high concentration of visible, lead sheathed submarine cables in varied states of abandonment along the banks of the Willamette River at nearly every major bridge crossing observed. This area is a major shipping corridor and remains busy with continued construction. Further investigation into the status of these cables is recommended.

Table 4. Summary of sample types and locations for Oregon.

Oregon (14 Sites with Samples)

Columbia River and Willamette River

General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
WR 1	3-Aug-2022	1	1	1	0	3	SWM
WR 1.1	3-Aug-2022	0	0	1	0	1	M
WR 2.2	4-Aug-2022	0	1	1	0	2	WM
WR 3	4-Aug-2022	0	1	1	0	2	WM
WR 3.2	4-Aug-2022	0	1	0	0	1	W
WR 4	4-Aug-2022	0	1	0	0	1	W
WR 5.1	4-Aug-2022	0	1	0	0	1	W
WR 6	4-Aug-2022	0	1	1	0	2	WM
WR 7	4-Aug-2022	0	1	1	0	2	WM
WR 8	4-Aug-2022	0	1	0	0	1	W
WR 9	4-Aug-2022	0	1	0	0	1	W
WR 10	4-Aug-2022	0	1	0	0	1	W
CR 1	4-Aug-2022	0	1	0	0	1	W
CR 2	4-Aug-2022	0	1	0	0	1	W
Totals for Oregon		1	13	6	0	20	

Notes for Oregon:

20 Samples collected from 14 Sites

Bold line items include a metal sample.



(A) Abandoned lead sheathed cable near Ross Island. WR 1. August 2022, Portland, Oregon.



(C) Five Bell Systems manholes with vault. WR 2.2. August 2022, Portland, Oregon.



(B) Eleven cables near Maritime Museum and Waterfront Park. WR 2.2. August 2022, Portland, Oregon.



(D) Smaller lead sheathed cable below Western Union Telecom Co. Sign. WR 3. August 2022, Portland, Oregon.

Figure 13. Photos. Oregon. (A) Point of Interest: WR 1. (B) Point of Interest: WR 2.2. (C) Point of Interest: WR 2.2. (D) Point of Interest: WR 3.



(E) North Steel Bridge cables. WR 6. August 2022, Portland, Oregon.



(G) Active construction site. Lead sheathed cable. Kiewit 204. WR 8. August 2022, Portland, Oregon.



(F) NW Broadway Bridge cables. WR 7. August 2022, Portland, Oregon.



(H) Possible Abernathy Bridge cable. WR 8. August 2022, Portland, Oregon.

Figure 14. Photos. Oregon continued. (E) Point of Interest: WR 6. (F) Point of Interest: WR 7. (G) Point of Interest: WR 8. (H) Point of Interest: WR 8.

Idaho

Investigation of data points along the Snake River, Clearwater River, and Lake Pend Oreille over a period of two field days from August 5-6, 2022. MTS screened a total of eight different site locations across the state of Idaho, with a total of fifteen points of interest containing GPS data. Three points around Lake Pend Oreille contained four visible cables, with one of those points being a newer fiber optic line; two points of interest were recorded with Bell Systems manholes with a total of three manholes; leaving the remaining points of interest being a combination of old telecommunication signage, old telephone poles, control locations and cable corridors where no cables were identified. Signs that remained standing within the cable corridors and those tacked into old telephone poles, are related to General Telephone Company (GTE), Century Link, and Bell Systems. Coordinates for each site and sample location can be found in the documents below.

20220805_Idaho Data Collection – Final

20220806_Idaho Data Collection – Final

Clearwater River and Snake River

Aside from three Bell Systems manholes and three points with “Cable Crossing” signs, this area was void of visible cables. Our team spoke with a lifetime resident and local fisherman on the Clearwater River near the Levee Path in North Lewiston who was aware of the cables from growing up. It is possible with more time and resources we might find them on the riverbed.

Lake Pend Oreille

There was one point with visible lead sheathed cables in Idaho that was found in Lake Pend Oreille on the southeast end of the railroad bridge near Highway 95. This collection of cables was cut and left in place at the base of the bridge. At the time of our most recent visit, there was construction work and a large barge over the location of the cables which are tangled underwater. Refer to Figure 15A-D and Figure 16E-G for Lake Pend Oreille photos.

Analytical Results

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 5. Summary of sample types and locations for Idaho.

State Summary & Recommendations

Overall, our findings in Idaho showed few visible lead sheathed cables with a high potential of buried cables in areas where signs and Bell Systems manholes were observed. The cables found off the old railroad bridge have been cut and left near the base of the bridge. They are clearly abandoned and should be removed. Further investigation into the status of these cables and how to move forward with the next steps of removing the remnants is suggested.

Table 5. Summary of sample types and locations for Idaho.

Idaho (8 Sites with Samples)							
Snake River, Clearwater River, and Lake Pend Oreille (Pend Oreille River)							
General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
SR 2.1	5-Aug-2022	0	1	0	0	1	W
SR 1	5-Aug-2022	0	1	0	0	1	W
CLR 3.2	5-Aug-2022	0	1	0	0	1	W
LP 1.2	6-Aug-2022	1	1	0	0	2	SW
LP 2	6-Aug-2022	0	1	0	0	1	W
LP 3	6-Aug-2022	0	1	0	0	1	W
LP 4.1	6-Aug-2022	0	2	1	0	3	WM
LP 5	6-Aug-2022	0	1	0	0	1	W
Totals for Idaho		1	9	1	0	11	

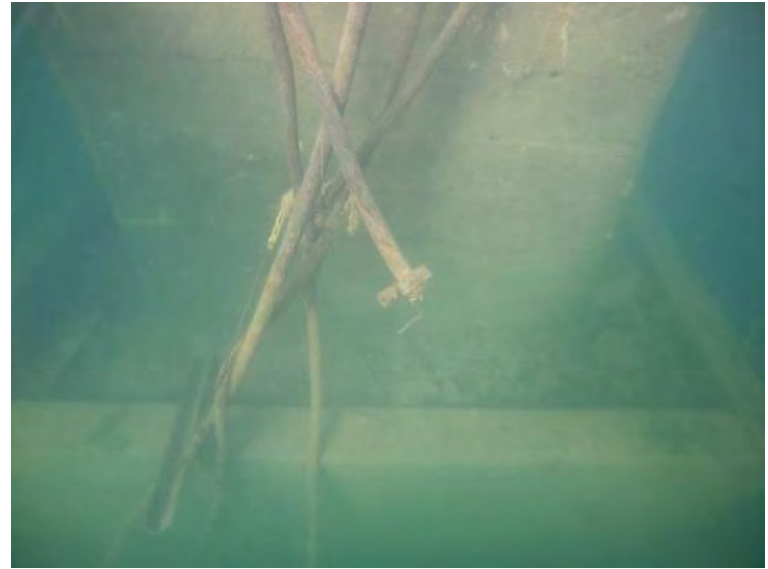
Notes for Idaho:

11 Samples collected from 8 Sites

Bold line items include a metal sample.



(A) Lake Pend Oreille, ID Railroad Bridge. August 2022.



(B) Photo. Lead sheathed cables just below the surface. Site LP 4.1. August 2022, Lake Pend Oreille, ID.



(C) Lead sheathed cables cut and hanging from bridge. Site LP 4.1. August 2022, Lake Pend Oreille, ID.



(D) Bare lead (upper-left). Cut end, near fish (mid-right). Site LP 4.1. August 2022, Lake Pend Oreille, ID.

Figure 15. Photos. Idaho. (A) Lake Pend Oreille Railroad Bridge. (C-D) Point of Interest: LP 4.1.



(E) Close up of small, cut, bare lead sheathed cable underwater. Site LP 4.1. August 2022, Lake Pend Oreille, ID.



(F) Lead sheathed cables abandoned and coiled below the surface. Site LP 4.1. August 2022, Lake Pend Oreille, ID.



(G) Close up of bare lead from abandoned cables. Site LP 4.1. August 2022, Lake Pend Oreille, ID.

Figure 16. Photos. Idaho continued. (E-G) Point of Interest: LP 4.1

Appalachia Region

Pennsylvania

Investigation of data points along the Allegheny River, Ohio River, Monongahela River, including California Township (Coal Center) over a period of three field days from October 23-25, 2022. We screened a total of thirteen different site locations across the state of Pennsylvania with a total of thirty-two points of interest containing GPS data. Two points along the Allegheny River contained visible leaded cables; six points of interest were recorded with Bell systems manholes with a total of nine manholes; thirteen points of interest were recorded within California Township (Coal Center) which followed a bare, overhead, lead sheathed telecommunication cable; leaving the remaining points of interest being a combination of old telecommunication signage, old telephone poles, control locations and cable corridors where no cables were identified. Signs that remained standing within the cable corridors and those tacked into old telephone poles, are related to Bell Atlantic and Bell Telephone Company of PA. Coordinates for each site and sample location can be found in the documents below.

20221023 Pennsylvania Data Collection – Final

20221024 Pennsylvania Data Collection – Final

20221025 Pennsylvania Data Collection – Final

Note: A return trip was made the 14th of February 2023, to gain more information from the overhead telecom cable located in Coal Center, PA.

20230214 Pennsylvania Data Collection –Samples Collected – Final

20230214 Pennsylvania Data Collection –Tracked Data Points ONLY – Final

Allegheny River, Ohio River, and Monongahela River

Aside from the overhead cable found within California Township (Coal Center), there were only two points along the Allegheny River where visible lead sheathed cable was recorded. AR 1 also, has a small portion of lead sheathed cable running up an old telephone pole near a personal watercraft boat launch, with a sitting bench (Figure 17(A-C)).

California Township (Coal Center)

This is the first location during the project where extensive overhead lead sheathed cables were documented and observed. The areas of interest within California and Coal Center, are adjacent and to the west of the Penn West California University, an area that was notably less affluent. Thirteen points of interest were recorded, covering an approximate distance of .9 miles worth of visible, overhead lead sheathed cable (Figure 18(D-G)). This is an estimation following the streets, and not an exact calculation of length. This cable starts on 2nd Street, across from campus and runs through California to the edge of Coal Center where it appears to terminate a few blocks uphill from the Monongahela River's edge. The cable crosses overhead at parks, senior care centers, and many locations where kids were playing. Locals in the area suggested that other

adjacent townships may have similar overhead cables that should be explored. Recommend further investigations.

Analytical Results by Sample

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 6. Summary of sample types and locations for Pennsylvania.

State Summary & Recommendations

Overall, our findings in Pennsylvania showed few visible lead sheathed submarine cables and limited access to areas of interest due to areas of heavy overgrowth. This was the first location where overhead lead sheathed cables were observed and required a change in how the data was recorded for efficiency. The data application needed to be adjusted to not require the cable details for each point of interest, since it was the same cable running through town. MTS recognizes the need for a more thorough investigation of all areas with overhead bare lead sheathed cables.

Table 6. Summary of sample types and locations for Pennsylvania.

Pennsylvania (19 Sites with Samples)							
Ohio River, Allegheny River, Coal River, and California Township (Coal Center)							
General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
AR – 1	24-Oct-2022	1	0	0	0	1	S
AR – 2	24-Oct-2022	0	1	0	0	1	W
AR – 5	24-Oct-2022	0	1	0	0	1	W
CR – 1	25-Oct-2022	1	1	0	0	2	SW
CR – 2	25-Oct-2022	1	0	0	0	1	S
CT – 1	25-Oct-2022	1	0	0	0	1	S
CT – 2	25-Oct-2022	1	0	0	0	1	S
CT – 3	25-Oct-2022	1	0	1	0	2	SM
CT – 4	25-Oct-2022	1	0	0	0	1	S
CT – 5	25-Oct-2022	1	0	0	0	1	S
CT – 6	25-Oct-2022	1	0	0	0	1	S
CT – 7	25-Oct-2022	1	0	0	0	1	S
CT – 8	25-Oct-2022	1	0	0	0	1	S
CT – 9	25-Oct-2022	1	1	1	0	3	SWM
CT – 10	25-Oct-2022	1	1	0	0	2	SW
CT – 11	25-Oct-2022	1	0	0	0	1	S
CT – 12	25-Oct-2022	1	0	0	0	1	S
CT – 13	25-Oct-2022	1	1	0	0	2	SW
OR – 3.1	25-Oct-2022	0	1	0	0	1	W
Totals for Pennsylvania		16	7	2	0	25	

Notes for Pennsylvania:

25 Samples collected from 19 Sites

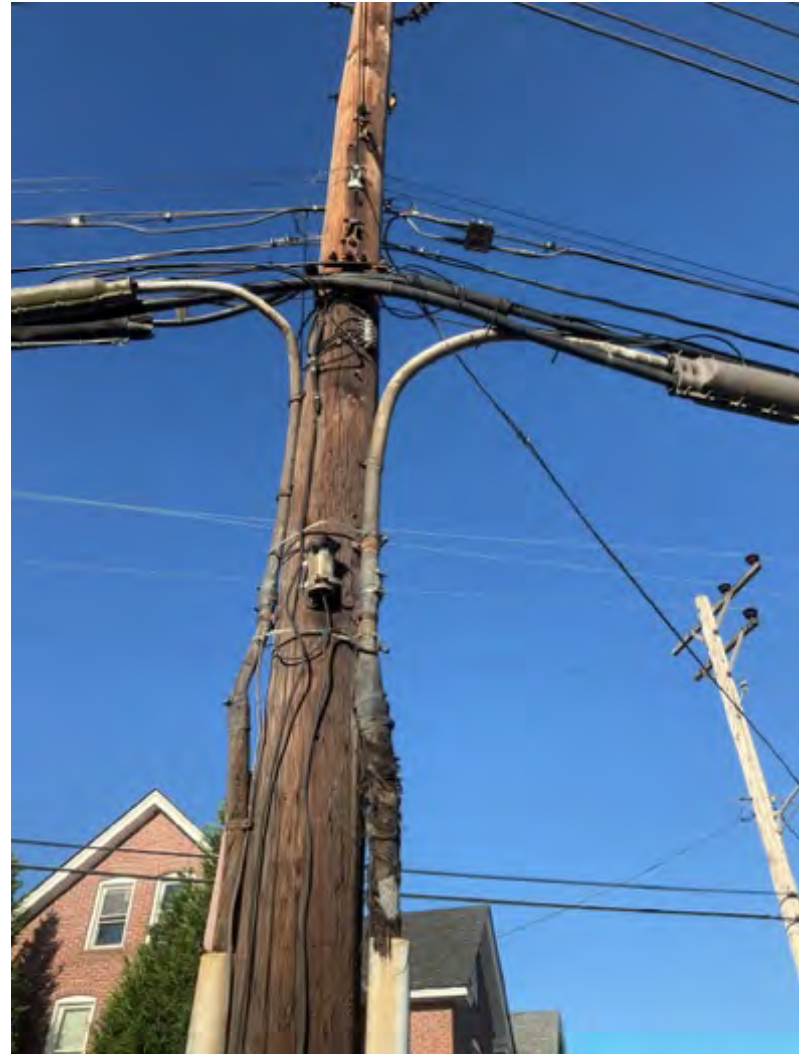
Bold line items include a metal sample.



(A) Park bench near exposed lead sheathed cables and splice boxes. October 2022. Natrona, Pennsylvania.



(B) Base of telephone pole in (A) and (C) showing marked cable going into the ground. October 2022. Natrona, Pennsylvania.



(C) Close up of lead sheathed cable and splice boxes referenced in (A). October 2022. Natrona, Pennsylvania.

Figure 17 Photos. Pennsylvania. (A-C) Point of Interest: AR 2.



(D) CT6. Overhead lead sheathed cable running across the entrance into apartments and over access to mailboxes. February 2023. Coal Center, Pennsylvania.



(F) CT11. Overhead lead sheathed cable running through a residential area near the end of town. February 2023. Coal Center, Pennsylvania.



(E) CT8. Overhead lead sheathed cable running across a greenway and sidewalk. February 2023. Coal Center, Pennsylvania.



(G) CT12. Overhead lead sheathed cable running across the road next to homes. October 2022. Coal Center, Pennsylvania.

Figure 18. Photos. Pennsylvania continued. (D-G) Points along the lead sheathed telecommunications cable that runs approximately 0.9 miles through California Township and Coal Center, PA. CT 6, CT 8, CT 11 (February 2023), and CT 12 (October 2022). California Township and Coal Center, Pennsylvania.

West Virginia

Investigation of data points along the Coal River and Kanawha River over a period of two field days from October 26-27, 2022. MTS screened a total of fourteen different site locations across the state of West Virginia with a total of twenty-eight points of interest containing GPS data. Three points along the Kanawha River contained visible lead sheathed cables; fourteen points of interest were recorded with Bell Systems manholes with a total of five manholes; leaving the remaining points of interest being a combination of old telecommunication signage and old telephone poles. People in this area appeared suspicious of us. As a result, we were unable to gain access to a few locations of interest. Signs that remained standing within the cable corridors and those tacked into old telephone poles, suggest that the primary telecommunications company for this area was C&P Telephone Company of West Virginia. Coordinates for each site and sample location can be found in the documents below.

20221026 West Virginia Data Collection – Final

20221027 West Virginia Data Collection – Final

Kanawha River

The only three locations in our screening areas were along the Kanawha River. At Site KR 1.3, we identified two lead sheathed cables (Figure 19). This is the landing area for the Old Pliny Ferry Crossing near Frazier Bottom. Site KR 3.1 was heavily overgrown; but we were able to identify at least two lead sheathed cables with splice boxes with sections of bare lead. The cable identified in Site KR 3.5 is part of the overall Site 3. From a distance we were only able to identify one cable on the telephone poles with bare lead. The cable corridor continues along railroad tracks and was largely inaccessible to track the cable further. For additional information please see “*20221026 West Virginia Data Collection – Final*”.

Analytical Results by Sample

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 7. Summary of sample types and locations for West Virginia..

State Summary & Recommendations

Overall, our findings in West Virginia showed few visible lead sheathed cables and limited access to areas of interest due to areas of heavy overgrowth and unwelcoming neighborhoods. However, there is evidence to support further investigation.

Table 7. Summary of sample types and locations for West Virginia.

West Virginia (11 Sites with Samples)

Coal River and Kanawha River

General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
Coal R - 1	26-Oct-2022	0	1	0	0	1	W
KR - 1.2	26-Oct-2022	0	1	0	0	1	W
KR - 1.3	26-Oct-2022	1	0	0	0	1	S
KR - 2	26-Oct-2022	0	1	0	0	1	W
KR - 3.1	26-Oct-2022	1	0	1	0	2	SM
KR - 3.3	26-Oct-2022	0	1	0	0	1	W
KR - 3.4	26-Oct-2022	0	1	0	0	1	W
KR - 4	26-Oct-2022	1	0	0	0	1	S
KR - 5	26-Oct-2022	0	1	0	0	1	W
KR - 11	26-Oct-2022	0	1	0	0	1	W
Totals for West Virginia		3	7	1	0	11	

Notes for West Virginia:

11 Samples collected from 11 Sites

Bold line items include a metal sample.



Figure 19. Photos taken in West Virginia. Site for the Old Pliny Ferry Crossing at Frasier's Bottom. Two bare lead sheathed cables were observed at the end of Ferry Lane. KR 1.3. October 2022, Pliny, West Virginia.

Mid-Atlantic Region

New Jersey

Investigation of data points along the Passaic River and Hackensack River, including the South Kearny Area over a period of two field days: the ninth and tenth of January 2023. MTS screened a total of twenty-one different site locations across the state of New Jersey with a total of forty-five points of interest containing GPS data. Eleven points shared an approximate total of fifty-three visible lead sheathed cables; five of those points were areas containing bare, overhead lead sheathed cable; sixteen points were recorded with Bell Systems or AT&T manholes with a total of forty manholes and two utility buildings; leaving the remaining points of interest being a combination of old telecommunication signage, telephone poles, control locations and one suspected gas pipeline point. Signs that remained standing within the cable corridors and those tacked into old telephone poles, suggest that the primary telecommunications company for this area was Bell Systems and AT&T. Coordinates for each site and sample location can be found in the documents below.

20230109_New Jersey Data Collection – Final

20230110_New Jersey Data Collection – Final

Hackensack River

The investigation along the Hackensack River started with an active construction site containing four Bell System manholes and what appeared to be an old abutment at the water's edge. This site is identified as Hackensack 1 in the data files and would be where the cables came to ground, but access was limited due to construction. For this reason, no samples were collected at this location. The workers allowed us near the fenced area for quick observations. The next location Hackensack 2, had visible cable crossing signs on both sides of the Passaic River, identifying it as a cable corridor. There was a large concrete vault with eight Bell Systems manholes at the river's edge and within the Lincoln Park & Nature Trail recreation area, suggesting that this location is an area that would contain numerous cables (Figure 20(A-D)). Hackensack 3 was recorded in the now, largely abandoned areas around the American Dream Plaza, Meadowlands. This area used to have an old marina and launch ramp at River Barge Park with two adjacent piers that may have served as an old Ferry landing. This area consisted of cable crossing signs on both sides of the river, at least one old telephone pole, one Bell Systems manhole and an old Bell Systems Utility Building. Location observations suggested an old telecommunications cable existed at one point going into the building. There was newer AT&T flagging on the ground, but overall, the area was largely overgrown and difficult to traverse (Figure 21(E-G)). It does warrant further investigation and access from the river to determine without a doubt if submarine cables remain in place. The other locations along the Hackensack included cable crossing signs, Bell Systems manholes, a newly developed bridge area, and the South Kearny area, which is addressed separately.

Passaic River

The investigation along the Passaic River started with an Old Bell Utility Building with seven Bell Systems manholes scattered around the area: four behind a chain link fence and three in a nearby grass area. This is likely a hub or main connection point for multiple cables. There were three main

locations in New Jersey that contained a complex scattering of manholes and numerous visible lead sheathed cables; Passaic 2 with approximately twenty lead sheathed cables visible on both sides of the Bridge Street Bridge (Figure 22(H-I)); Passaic 5 with approximately twenty-one visible, lead sheathed cables between the eleven points of interests near the Washington Crossing State Park, and Passaic 8 with eleven visible, lead sheathed cables on both sides of the Wall Street Bridge (Figure 23(J-L)). Finally, Passaic 3 contained one visible, armored telecommunications cable (Figure 24(A)). There was approximately fifteen feet of armoring before the cable was visible near the waterline. Once the armoring terminated and the lead sheathed cable became visible just above the waterline, observations of lead residue became apparent. This cable was only visible on one side of the bridge and would not be visible with higher water levels.

South Kearny Area

South Kearny is a location with approximately 0.4 miles of exposed, overhead lead sheathed telecommunications cables (2 cables, 2" diameter). Both ends of the cable are cut and shrink wrapped, however, much of the cable remains exposed to the elements (Figure 24(B)). There are remnants of old hangers on wire that would have aided in holding the weight of the cable. These can be seen in the field reports 9 January 2023 under South Kearny, End A. We collected four sediment samples within the 0.4-mile area of the cable. One control location and three below the hanging cable. All coordinates can be found in the New Jersey Data Collection Files.

Analytical Results by Sample

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 8. Summary of sample types and locations for New Jersey.

State Summary & Recommendations

Overall, our findings show a significant increase in the density and the number of visible lead sheathed submarine cables within screened locations, and a growing trend of observations with overhead, lead sheathed telecommunication cables. New Jersey is a candidate for further scientific research given easy access to areas with numerous lead sheathed cables. MTS recommends a more thorough investigation of all areas with overhead bare lead sheathed cables.

Table 8. Summary of sample types and locations for New Jersey.

New Jersey (17 Sites with Samples)							
Passaic River and South Kearny Neighborhood							
General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
Passaic 10	10-Jan-2023	1	0	0	0	1	S
Passaic 2	10-Jan-2023	0	1	1	0	2	WM
Passaic 3	9-Jan-2023	1	1	0	0	2	SW
Passaic 4	9-Jan-2023	1	0	0	0	1	S
Passaic 5.10	10-Jan-2023	1	1	1	0	3	SWM
Passaic 5.3	10-Jan-2023	1	1	1	0	3	SWM
Passaic 5.8	10-Jan-2023	1	1	3	0	5	SWM
Passaic 5.9	10-Jan-2023	1	1	0	0	2	SW
Passaic 6	10-Jan-2023	1	0	0	0	1	S
Passaic 7	10-Jan-2023	1	0	0	0	1	S
Passaic 8	10-Jan-2023	1	1	2	0	4	SWM
Passaic 8.1	10-Jan-2023	1	1	0	0	2	SW
Passaic 9	10-Jan-2023	1	0	0	0	1	S
South Kearny 1	9-Jan-2023	1	0	0	0	1	S
South Kearny 2	9-Jan-2023	1	0	0	0	1	S
South Kearny 3	9-Jan-2023	1	0	0	0	1	S
South Kearny 4	9-Jan-2023	1	0	0	0	1	S
Totals for New Jersey		16	8	8	0	32	

Notes for New Jersey:

32 Total Samples collected from 17 Sites

Bold line items include a metal sample.



(A) Large vault with eight Bell Systems manholes on the Hackensack River. Looking towards South Kearny. January 2023, West Side, New Jersey.



(C) Vault area looking towards Lincoln Park Wetlands & Nature Trail. January 2023, West Side, New Jersey.



(B) Cable landing area covered with concrete. Area is below the sign in (D). January 2023, West Side, New Jersey.

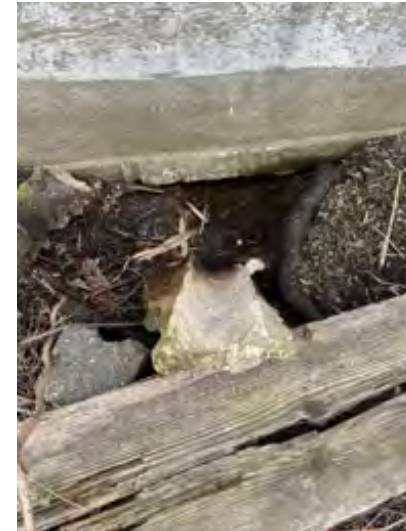


(D) Cable Crossing Sign. January 2023, West Side, New Jersey.

Figure 20. Photos. New Jersey. (A-D) Cable locations near Lincoln Park Wetlands & Nature Trail. Hackensack 2. January 2023, West Side, New Jersey.



(E)



(F)



(G)

Figure 21. Photos. New Jersey continued. (E) Largely abandoned area around the Meadowlands. Old Bell Systems manhole and utility building. (F) Concrete casing that would have laid on top of the old lead sheathed cable. This is like those found on the Detroit River, Location 1. (G) Newer AT&T flagging found a few feet away from the building. Hackensack 3.2. January 2023, Meadowlands, New Jersey.



(H) Evidence of homeless sleeping next to these cables along the Passaic River. Passaic 2. January 2023, Harrison/University Heights, New Jersey.



(I) Cable location with twenty lead sheathed cables underneath the Bridge Street Bridge (Harrison Ave.). Passaic 2.1 January 2023. Harrison/University Heights, New Jersey.

Figure 22. Photos. New Jersey continued. (H) Points of Interest: Passaic 2. (I) Point of Interest: Passaic 2.1.



(J) Part of a complex site containing twenty-one cables near Washington Crossing State Park along the Passaic River. Passaic 5.10. January 2023. New Jersey.



(K) Close up of cables at Passaic 8. January 2023. New Jersey.



(L) Part of an eleven-cable location found near Wall Street Bridge, between Garfield and Wallington. Passaic 8. January 2023. New Jersey.

Figure 23. Photos. New Jersey continued. (J-K) Cable location with approximately twenty-one exposed lead sheathed cables underneath the Main Avenue Bridge near Wallington, New Jersey. This was a complex site with cables in multiple locations withing the site and included twelve different points of interest. Passaic Location 5. January 2023. Wallington, New Jersey.



(A) Armored cable approximately fifteen feet from the water's edge. Passaic 3. January 2023, Belleville, New Jersey.



(B) Overhead cut, lead sheathed cables in the South Kearny area. There are two cables that run approximately 0.4 miles. South Kearny End A. January 2023, Kearny, New Jersey.

Figure 24. Photos. New Jersey continued. (A) Point of Interest: Passaic 3. (B) Point of Interest: South Kearny End A.

New York

Investigation of data points along the Hudson River, Harlem River, Wappingers Falls and the Townships of New Windsor, Newburgh, Highland Falls, and the Palisades; over a period of two field days from January 11-12, 2023. MTS screened a total of twenty-three different site locations across the state of New York with a total of thirty-seven points of interest containing GPS data. Fourteen points with visible lead sheathed cables were found in the areas of Highland Falls, New Windsor, Newburgh, Wappingers Falls and the Hudson River; four points of interest were recorded with Bell Systems manholes with a total of four manholes and a potential vault; leaving the remaining points of interest being a combination of old telecommunication signage and old telephone poles. Signs that remained standing within the cable corridors and those tacked into old telephone poles, suggest that the primary telecommunications company for this area was Bell Systems, New York Telephone and Verizon. Coordinates for each site and sample location can be found in the documents below.

20230111 New York Data Collection – Final

20230112 New York Data Collection – Final

Highland Falls Township

Four generalized data points were recorded for Highland Falls Township. Lead sheathed cable appears to run throughout the town and is occasionally covered with a protective sheathing that encompasses parts of the cable. Visible bare leaded splice boxes were observed at nearly every telephone pole. (Figure 25(A-C)). This site required more time than was available for detailed observations and further investigation is recommended.

Hudson River and Palisades

Three points along the Hudson River contained a total of eleven visible lead sheathed cables. One of these points (Hudson 7) is also referenced in the Palisades Neighborhood where overhead lead sheathed cables were observed. Hudson 3 location was the most comprehensive location with points of interest along the east and west shorelines of the Hudson River. This location contained evidence of old telecommunication signage; Bell Systems manholes and possible vault, visible lead sheathed cables; and cut cables at the base of an old telephone pole (Figure 26(D-E)).

Newburgh and New Windsor Townships

Eight generalized points were recorded across Newburgh and New Windsor Townships. MTS observed cables at various locations while passing through both towns. In Newburgh, MTS spoke with a Verizon worker who mentioned that lead was a concern in the area, but that the company was understaffed and unable to address those concerns. Newburgh was the first area that our team noticed a plastic umbrella covering, that we learned was called a squirrel guard (Figure 27(F-G)). This covering does not contain the entire cable and appears to be intended to help prevent the squirrels from eating the cables and damaging the lines. In New Windsor, one point was recorded showing damaged cable and splice box at the base of a telephone pole near a busy intersection. The cable looks to be out of service but would require a more thorough investigation (Figure 27).

Palisades Neighborhood -Washington Square Road, and Hudson River

There are three generalized points within the Palisades Neighborhood. Hudson 7 and Hudson 8 are also both found in the Palisades Neighborhood where Washington Springs Road turns into Snedens Landing and terminates along the Hudson River. This is an affluent area filled with mansions and has sections of overhead bare lead sheathed cable running from the river and up along Washington Springs Road. MTS stopped tacking the cable near highway 9W. It is a relatively compact neighborhood with narrow roads leading to the large mansions. The utility poles are close to the road with lead sheathed cables running directly overhead. MTS recommends a more thorough investigation of the area to determine if there are additional lines that were not initially observed (Figure 28(H-J)).

Wappingers Falls Township

Three points within Wappingers Falls contained visible lead sheathed cables; observations at Wappingers Falls 3 show a damaged cable and splice box at the base of a telephone pole. The cable looks to be out of service (Figure 29(K-L)). Wappingers Falls 4 has an overhead lead sheathed cable near a grassy play area. MTS recommends a more thorough investigation.

Analytical Results by Sample

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 9. Summary of sample types and locations for New York.

State Summary & Recommendations

Overall, our findings in New York were like those in New Jersey, with visible lead sheathed submarine cables and an increasing number of observed, overhead, lead sheathed telecommunication cables. MTS recommends more thorough investigation of all areas with overhead bare lead sheathed cables, to map locations and determine if there are health and safety risks that may be present for the residents.

Table 9. Summary of sample types and locations for New York.

New York (11 Sites with Samples)							
Hudson River, New Windsor and Wappingers Falls							
General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
Hudson 3.1	11-Jan-2023	0	1	0	0	1	W
Hudson 3.4	11-Jan-2023	1	0	1	0	2	SM
Hudson 4	11-Jan-2023	0	1	0	0	1	W
Hudson 5	12-Jan-2023	0	1	0	0	1	W
Hudson 6	12-Jan-2023	1	0	0	0	1	S
Hudson 7	12-Jan-2023	1	1	0	0	2	SW
Hudson 8	12-Jan-2023	1	0	0	0	1	S
New Windsor 1	11-Jan-2023	1	0	1	0	2	SM
New Windsor 2	11-Jan-2023	1	0	0	0	1	S
Wappingers Falls 3	12-Jan-2023	0	0	1	0	1	M
Wappingers Falls 4	12-Jan-2023	1	0	0	0	1	S
Totals for New York		7	4	3	0	14	

Notes for New York:

14 Total Samples collected from 11 Sites

Bold line items include a metal sample.



(A) Close up of telephone poles with overhead lead sheathed cable and leaded splice boxes. January 2023. Highland Falls, New York.



(B) Overhead lead sheathed cables in front of an apartment complex. January 2023. Highland Falls, New York.



(C) Exposed bare lead splice box and lead cable. January 2023. Highland Falls, New York.

Figure 25. Photos. New York. (A-C) Point of Interest: Highland Falls 1-3.



(D) Cables run under the road and into the Hudson River near the Mid-Hudson Bridge at Point of Interest: Hudson 3.1. January 2023. Highland, New York.



(E) Severed cable and steel wire at the base of an old telephone pole, across from those shown in (D). Point if Interest: Hudson 3.4. January 2023. Highland, New York.

Figure 26. Photos. New York continued. (D) Point of Interest: Hudson 3.1. (E) Point of Interest: Hudson 3.4.



(F) “Squirrel Guard” tied around an exposed area of lead sheathed cable. Point of Interest: Newburgh 1. January 2023, Newbury, New York.



(G) Damaged lead cable and splice box at the base of an old telephone pole. Point of Interest: New Windsor 1. January 2023, New Windsor, New York.

Figure 27. Photos. New York continued. (F) Point of Interest: Newburgh 1. (G) Point of Interest: New Windsor 1.



(H) Abandoned 5" lead sheathed cable along the Hudson River. January 2023, Palisades, New York.



(I) Close up of abandoned 5" lead sheathed cable along the Hudson River. January 2023, Palisades, New York.



(J) Bare lead sheathed cable running up telephone pole in the Palisades. January 2023, Palisades, New York.

Figure 28. Photos. New York continued. (H-I) Point of Interest, Hudson 7. (J) Point of Interest: Palisades 3.



(K) Damaged lead sheathed cable at the base of a telephone in Wappingers Falls. Point of Interest: Wappingers Falls 3. January 2023, Wappingers Falls, New York.



(L) Close up of damaged lead sheathed cable shown in (K). Wappingers Falls 3. January 2023, Wappingers Falls, New York.

Figure 29. Photos. New York continued. (K-L) Point of Interest: Wappingers Falls 3.

West Region

California

Investigation of data points along two specific cables that have been identified in Lake Tahoe and Emerald Bay: over a period of four field days from March 30-31, and May 5-6, 2023. MTS screened a total of twenty-one points of interest along both cables to collect samples. The primary telecommunications company for this area was Bell Systems and AT&T. Coordinates for each site and sample location can be found in the documents below.

20230330 California Data Collection – Final
20230331 California Data Collection – Final
20230505 California Data Collection - Final
20230506 California Data Collection – Final

Lake Tahoe

The main Lake Tahoe cable is approximately seven miles long and runs along the western shoreline from Baldwin Beach to Four-Ring Road. It was installed in 1955 in efforts to extend and improve telecommunications to the west shore. This is a 3.5-inch lead sheathed cable with five leaded splice boxes on land. This cable is not severed in water, however, there are numerous damaged locations. This cable is severed on land. The cable can be observed above water to roughly 100-ft deep in Lake Tahoe. The Rubicon area is a wall of granite, and the cable is draped along the granite wall and boulders. All steel rock anchors and associated cables that would have held the cable in place, are broken (Figure 30(A-C) and Figure 31(D-F)).

Emerald Bay

The shorter Emerald Bay cable is approximately two thousand feet long and runs across the mouth of Emerald Bay. It was installed in 1928 in efforts to bring telecommunication to the Vikingsholm Property located within the bay. This is a 3-inch lead sheathed cable with two severed ends in the water. At some point, this cable was drug and damaged by a large vessel and now rests by the sill of Emerald Bay. It is possible, this event or series of events lead to its abandonment (Figure 32 (G-H)).

Analytical Results by Sample

MTS has not performed any analysis relative to collected field samples and their lead content. See Table 10. Summary of sample types and locations for California.

State Summary & Recommendations

These two cables are part of an ongoing settlement, where AT&T has agreed to remove them from Emerald Bay and Lake Tahoe. A list of results for sampled points of interest can be found in Appendix F and Appendix G, at the end of this document.

Table 10. Summary of sample types and locations for California.

California - Lake Tahoe Cable (26 Sites with Samples)

Lake Tahoe including Emerald Bay

General Information		Type of Sample Collected					
Site	Date Collected	Sediment (S)	Water (W)	Metal (M)	Other (O)	Total per Site	Code
LTI 1.1	5-May-2023	0	1	0	0	1	W
LT 1.2	30-Mar-2023 and 1-Apr-2023	1	0	3	0	4	SM
LTI 2.1	5-May-2023	0	1	0	0	1	W
LTI 3.1	5-May-2023	0	1	0	0	1	W
EB 1	31-Mar-2023 and 5-May-2023	1	2	0	0	3	SW
EB 1.1	31-Mar-2023 and 5-May-2023	2	2	0	0	4	SW
EB 1.2	5-May-2023	0	1	0	0	1	W
EB 1.3	5-May-2023	0	1	0	0	1	W
EB 1.4	5-May-2023	0	1	0	0	1	W
EB 1.5	5-May-2023	0	1	0	0	1	W
EB 1.6	5-May-2023	0	1	0	0	1	W
EB 1.7	5-May-2023	0	1	0	0	1	W
EB 3	5-May-2023	0	1	0	0	1	W
EB 4	5-May-2023	0	1	0	0	1	W
LT 1.4	31-Mar-2023 and 5-May-2023	2	2	0	0	4	SW
LT 4	5-May-2023	0	1	0	0	1	W
LTI 7.1	6-May-2023	0	1	0	0	1	W
LTI 7.2	6-May-2023	0	1	0	0	1	W
LT 1.6	6-May-2023	1	1	0	0	2	SW
LT 1.7	6-May-2023	1	1	0	0	2	SW
LT 1.5	5-May-2023	1	0	0	0	1	S
LT 1	30-Mar-2023	1	0	0	0	1	S
LT 1.3	31-Mar-2023	1	0	0	0	1	S
LT 2	31-Mar-2023	1	0	0	0	1	S
LT 3	31-Mar-2023	1	0	0	0	1	S
EB 2	31-Mar-2023	0	1	0	0	1	W
Totals for California		13	23	3	0	39	

Notes for California:

39 Samples collected from 26 Sites

LT 1.2 has metal samples from an old cable, new cable, and splice box.

Bold line items include a metal sample.



(A) Severed lead sheathed cables, and lead splice box on land. This photo was during a site visit with AT&T in January 2021.



(B) Another splice location from land during the same site visit with AT&T in January 2021.



(C) Diver marking locations of damage during a survey in April/March 2022, Lake Tahoe, California.

Figure 30. Photos. California. (A-C) Lake Tahoe main telecommunications cable.



(D) Lead sheathed cable laying among boulders on the lake bottom. April/March 2022. Lake Tahoe, California.



(E) Part of a broken anchor on the cable near Rubicon. April/March 2022. Lake Tahoe, California.



(F) Broken cable anchor on land near Rubicon. April/March 2022. Lake Tahoe, California.

Figure 31. Photos. California continued. (D-F) All photos from survey in April/March 2022, Lake Tahoe, California.



(G) Severed end of 1920's cable in Emerald Bay. May 2021, Emerald Bay - Lake Tahoe, California.



(H) 1920's lead sheathed cable resting on the lake bottom in Emerald Bay. May 2021, Emerald Bay - Lake Tahoe, California.

Figure 32. Photos. California continued. (G-H) May 2021, Emerald Bay – Lake Tahoe, California.

DISCUSSION

MTS completed sampling in all six regions with the WSJ team, except for California. This collaboration was an initial investigation to identify the potential extent of lead-containing cables in multiple regions within the U.S. The regions and locations within the regions were targeted and sampled as requested by the WSJ. Where lab samples were collected, they were collected to determine the current level of lead in areas adjacent to cables; however, these data were not analyzed by MTS in a manner to determine the source of the lead.

Lead-sheathed cables were found in all regions visited. The investigation was not exhaustive. It is likely that additional cables containing lead could be identified if the investigation was expanded. Samples of the surrounding water and sediment in all regions came back with high lead numbers at some locations. Further investigations are needed to find sources of these lead hits in our drinking water and environment. Ultimately, MTS was only able to screen a small percentage of the locations provided by the Wall Street Journal as this was intended to be a preliminary study. Additional funding is needed to further investigate these issues.

REFERENCES

CDC Web Archive. 2012. Agency for Toxic Substances and Disease Registry. May 22, 2023.
https://www.atsdr.cdc.gov/csem/leadtoxicity/safety_standards.html#:~:text=EPA's%20action%20level%20for%20lead,items%2C%20cosmetics%20and%20bottled%20water

CDC Web Archive. 2019. Agency for Toxic Substances and Disease Registry. May 22, 2023.
https://www.atsdr.cdc.gov/csem/leadtoxicity/safety_standards.html#:~:text=EPA's%20action%20level%20for%20lead,items%2C%20cosmetics%20and%20bottled%20water

Rydel, M. 2022.

20220603_Louisiana Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20220604_Louisiana Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20220605_Louisiana Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20220625_Michigan Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20220626_Michigan Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20220627_Michigan Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20220803_Oregon Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20220804_Oregon Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20220805_Idaho Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20220806_Idaho Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20221023_Pennsylvania Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20221024_Pennsylvania Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20221025_Pennsylvania Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20221026_West Virginia Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20221027_West Virginia Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

Map Chart 2023, Map Chart website, accessed 04 July 2023, <https://www.mapchart.net>.

Rydel, M. 2023.

20230109_New Jersey Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20230110_New Jersey Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum

20230111_New York Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20230112_New York Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

20230214_Pennsylvania Data Collection – Final. Below the Blue 501(c)3/Lead Cable Investigation. Fulcrum.

EXHIBIT 3



Marine Taxonomic Services - EDF Service Agreement FY22 (Lead)

This Agreement for Services ("Agreement") is entered into as of April 14, 2022 (the "Effective Date") by and between Environmental Defense Fund, Incorporated ("EDF"), a not-for-profit organization, located at 1875 Connecticut Ave NW Washington, D.C. 20009, and Marine Taxonomic Services, Ltd. ("Consultant"), whose principal address is at 920 Rancheros Drive Ste F1, San Marcos, CA 92069.

1. Scope of Work.

- a) EDF seeks to understand the extent to which power and telecom cables running through rivers, streams and lakes that serve as drinking water sources may have been constructed using lead pipe and which may now pose a public health risk that needs to be addressed. The Consultant has particular expertise and experience conducting investigation in bodies of water. It also shares EDF's interest protecting public health should a risk be identified and, therefore, an interest making any finding from its work publicly available.
- b) EDF hereby engages Consultant, and Consultant hereby accepts such engagement, to provide the following services (the "Services") to EDF on the terms and conditions set forth herein:

Consultant will investigate six regions across the U.S. and perform research including but not limited to determining the composition of decommissioned power and telecom cables running through rivers, streams and lakes and evaluating the water around identified lead pipe cables for the presence of lead. The regions include West (California), Northwest (Oregon), Midwest (Michigan), New England (Massachusetts), Mid-Atlantic (Pennsylvania) and South (Georgia).

The Consultant will perform four activities:

- 1. *Planning & Data Review* consisting of:
 - a. Identifying specific communities where the Consultant predicts are most likely to have lead pipe cables based on available information;
 - b. Developing procedures to:
 - i. Document the presence and condition of lead pipe cables; and
 - ii. Determine when and how to test water for lead to represent the potential contamination of water from the lead pipe cables;
 - c. Proposing a schedule to conduct the on-site work in each region no more than three months from first site visits;
 - d. Making arrangements for EDF's preferred laboratory to provide water sampling supplies, receive samples, and analyze the samples for lead (and other metals if appropriate); and
 - e. Sharing information with EDF and resolving questions in coordination with EDF within two weeks.

2. *Cable Location Validation* consisting of:
 - a. Traveling to the specific communities;
 - b. Investigating potential locations for presence of lead pipe cables; and
 - c. Documenting the presence and condition of the lead pipe cables per agreed-to procedures.
 3. *Water Testing* consisting of:
 - a. Collecting water samples per agreed-to procedures;
 - b. Completing proper chain of custody records for each sample; and
 - c. Shipping the samples to EDF's preferred laboratory for analysis;
 4. *Data Compilation & Reporting* consisting of:
 - a. Within 60 days after completing the last on-site investigation, providing EDF with a draft report summarizing the four activities in (1) above and findings from the effort, results of each investigation and water sample tested; and recommendations; and
 - b. Finalizing the report within 30 days of receiving feedback from EDF.
- c) The work should be performed consistent with the Consultant's proposal to EDF in Attachment A. This contract does not include any litigation support or services, independent testing, or ongoing site visits.
- d) Consultant will:
1. Coordinate with EDF on the planning and data review;
 2. Provide updates on the cable location validation and water testing including the need for any variations from the agreed-to procedures and plans; and
 3. Ensure that no later than four months after the cable location validation and water testing is complete that the data is made publicly available at no cost.
- e) EDF will:
1. Provide prompt responses to Consultant for any queries;
 2. Share its independent assessment of the data with Consultant; and
 3. Pay the EDF-selected lab directly.
- f) Once the report and data are made public, nothing in this contract restricts in any way EDF's ability to share publicly or privately its assessment of the information.
- g) Consultant will determine the method, details, and means of performing the Services. Unless otherwise provided in this Agreement, Consultant shall supply all equipment and work materials required to perform the Services and shall be responsible for all costs and expenses incident to the performance of Services for EDF.
- h) Tom Neltner (tneltner@edf.org) will be the EDF point of contact to Consultant for the work under this Agreement. Seth Jones (seth@consultmts.com) will be the Consultant's point of contact to EDF.
- i) Consultant will use the following information in any financial correspondence:

Code to:

Department - Healthy Communities
Program - Health : Chemicals : Lead
Grant - No Grant

Workstream - Safer Chemicals : Lead
Region - United States

2. **Term.** The term of this Agreement shall commence on the Effective Date and end on December 31, 2022, unless earlier terminated in accordance with Section 11. This term may be extended by mutual written agreement between the parties.

3. **Compensation**

- a) In full consideration for the performance of the Services and the rights granted to EDF under this Agreement, EDF shall pay Consultant a fixed fee in the amount of US\$85,000, payable based on the following formula:
- \$5,000 based on identification of regions and finalization of investigation strategy and water testing protocol;
 - \$12,000 per region upon completion of cable location validation and water testing in a region for a maximum of \$72,000;
 - \$8,000 to compile and analysis the data from the investigations and provide final report.
- b) EDF will not reimburse Consultant for any expenses incurred by Consultant in performing this Agreement beyond the amount set forth in Section 3(a) above.
- c) EDF will disburse each payment hereunder upon Consultant's submission of and EDF point of contact's approval of invoice. Invoices should be submitted to Kashaf Momin kmomin@edf.org and Tom Neltner tneltner@edf.org. EDF will pay all undisputed fees via electronic transfer of funds to Consultant's account, using the banking information provided by Consultant, within thirty (30) calendar days of EDF's receipt and approval of an invoice submitted by Consultant.

4. **Work Product**

- a) All written or other Work Product generated pursuant to this Agreement shall be the property of Consultant. However, to ensure the widest possible distribution of such materials and ensure that they remain generally available to the public, Consultant grants to EDF an irrevocable, royalty-free, non-exclusive, worldwide, right and license to use, reproduce, publish, make derivative works, display and perform publicly any material first developed and delivered under this Agreement with appropriate attribution as requested by Consultant. Consultant, at EDF's reasonable request, agrees to execute any additional documents required to effect such license.
- b) Consultant is, and shall remain, the sole and exclusive owner of all intellectual property rights in and to all tangible and intangible subject matter that Consultant developed or acquired prior to the commencement or independently of this Agreement (the "Pre-Existing Materials"). To the extent that any Pre-Existing Materials are incorporated in or necessary or useful for any use or exploitation of any Work Product, Consultant shall and hereby does grant to EDF the rights and license to use, reproduce, publicly perform and display, modify, improve, create derivative works of, distribute, make, have made, and otherwise exploit any Pre-Existing Materials, including all such modifications, improvements and derivative works thereof, solely to the extent reasonably required for EDF's receipt or use of the Services or Work Product.

- c) Nothing herein shall be construed as granting Consultant any rights to the intellectual property of EDF, other than for the specific purpose of performing this Agreement.
- d) To the best of Consultant's knowledge, the Work Product does not contain any matter that is in violation of any intellectual property right or personal right of any third party, or otherwise violates any law.
- e) "Work Product" means any written materials produced by Consultant, including deliverables to complete work described in Section 1(b) above.

5. Confidentiality

- a) The Parties may disclose valuable Confidential Information to the other in the course of obtaining and/or providing Services under this Agreement. Each Party shall: (i) safeguard Confidential Information with equivalent to or greater precautions it takes to protect its own Confidential Information, but no less than a reasonable degree of care; (ii) not disclose Confidential Information to any third party, except as expressly provided for herein, as required by law or with the express written agreement of the points of contact on behalf of the Parties; and (iii) not use the Confidential Information for any purpose other than in connection with the purpose for which it was shared.
- b) Notwithstanding the foregoing, the Parties acknowledge and agree that, consistent with the requirements of 5.a.ii, the final report and supporting data for the project is being created with the intention that they will be disclosed and may be made publicly available, without restriction sometime after completion of the work. The Parties agree that the supporting data may reveal public health risks that a Party, in its sole discretion, considers significant enough to more immediately notify federal, state or local authorities for appropriate action, in which case, each Party reserves the right to provide such notice after informing the other party, in writing, of its intentions to do so and the authority to whom such disclosure is being made.
- c) "Confidential Information" means any non-public material(s), document(s), or communication(s) (oral, written, or digital) disclosed by one Party to the other, including without limitation all Work Product and information that: (i) concerns the business affairs, operations, plans, know-how, trade secrets, business affairs, personnel, vendors or suppliers of the disclosing Party; (ii) is designated as confidential, restricted, proprietary, or with similar designation or which the receiving Party knows or might reasonably expect is regarded by the disclosing Party as the confidential information; (iii) concerns EDF Protected Personal Data; or (iv) concerns any of the terms or conditions or other facts with respect to this Agreement unless otherwise specified by EDF. Confidential Information does not include any information that: (v) is or becomes generally available to the public other than as a result of the receiving Party's act or omission; (vi) is obtained on a non-confidential basis from a third party that was not legally or contractually restricted from disclosing such information; (vii) was in a receiving Party's possession prior to disclosure hereunder; or (viii) was or is independently developed by Consultant without using any Confidential Information.
- d) Nothing herein shall be construed to prevent disclosure of Confidential Information as may be required by applicable law or regulation, or pursuant to the valid order of a

court of competent jurisdiction or an authorized government agency, provided that the disclosure does not exceed the extent of disclosure required by such law, regulation or order. Consultant agrees to promptly provide written notice of any such order to EDF.

6. Prohibition on Lobbying and Political Activities. Consultant agrees that no funds received under this Agreement shall be used by Consultant to:

- a) Carry on propaganda, or otherwise attempt to influence legislation, as defined in Section 4911(d) of the Internal Revenue Code (the "Code"), through (i) an attempt to affect the opinion of the general public or any segment thereof or (ii) communication with any member or employee of a legislative body, or with any other governmental official or employee who may participate in the formulation of the legislation (except technical advice or assistance provided to a governmental body or to a committee or other subdivision thereof in response to a written request by such body, committee or subdivision), other than through making available the results of non-partisan analysis, study or research;
- b) Engage in activities that would require Consultant (or any person employed by or acting on behalf of Consultant) to register or be identified as a lobbyist of EDF under the Lobby Disclosure Act, 2 U.S.C. §§1601-1612 or in any registration or report filed with a public entity (whether local, state or federal); or
- c) Engage in any exempt function activities, as defined under Section 527 of the Code, including by (directly or indirectly) influencing the outcome of any specific public election, supporting the election or defeat of a candidate for public office, or financing electioneering communications.

7. Consultant Representations and Warranties. Consultant (or any person employed by or acting on behalf of Consultant), hereby represents, warrants and covenants that:

- a) Consultant has the full legal right, power and authority to enter into this Agreement and perform the obligations set forth herein and when executed by Consultant, this Agreement will constitute the legal, valid and binding obligation of Consultant, enforceable against Consultant in accordance with its terms;
- b) Consultant has the required skill, experience and qualifications to perform the Services, it shall perform the Services in a professional and workmanlike manner in accordance with then-current accepted industry standards, and it shall devote sufficient resources to ensure that the Services are performed in a timely and reliable manner;
- c) Consultant will inform EDF if any Consultant personnel engaged on work pursuant to this Agreement becomes a candidate for public office, or accepts a public position. In such case, Consultant certifies that she/he will become familiar with, and comply with, all conflict of interest laws, campaign finance laws, and ethics that apply to their public position, and that he/she will not cause EDF to violate any conflict of interest, campaign finance or ethics laws;
- d) Consultant owns or has the right to use, free and clear of any claims or rights of others, all trade secrets, inventions, developments, customer lists, software, and other information and know-how (if any) used in its business. Consultant is not making any

unlawful use of any third party confidential information, copyrighted materials, know-how, trade secrets or established privacy rights of any third party.

- e) Consultant shall comply with all applicable federal, state and local laws, rules and regulations¹ in connection with the provision of Services and the creation of any Work Product;
- f) In furtherance of EDF's corporate values and obligations under applicable ethics laws, Consultant will adhere to and uphold the EDF Third Party Code of Conduct [https://www.edf.org/sites/default/files/documents/EDF Third Party Code of Conduct.pdf](https://www.edf.org/sites/default/files/documents/EDF%20Third%20Party%20Code%20of%20Conduct.pdf)

Should Consultant or anyone acting on its behalf engage in any activities that fail to conform to the Third Party Code of Conduct, Consultant shall immediately notify EDF.

8. Insurance, Indemnification and Limitations of Liability.

- a) During the term of this Agreement, Consultant must maintain insurance with limits commensurate with the work being performed hereunder against all losses and risks to property and persons occasioned by its work, and in such amounts as are prudent and customary in the business in which Consultant is engaged. Given the particular nature of Consultant's work, the foregoing must include comprehensive marine and boat insurance, as well as dive accident insurance covering each individual engaged on the project, including without limitation, any on-, in- and under-water activity. Upon EDF's written request, Consultant shall provide to EDF proof of insurance coverage and shall add EDF as an additional insured. In any event, Consultant acknowledges and agrees that it is being engaged to undertake work that involves inherent risks for which it is uniquely qualified and skilled to assess and undertake, and that it assumes all risk of performance under this Agreement.
- b) Consultant shall defend, indemnify and hold harmless EDF, its affiliated organizations, and their respective directors, officers, employees and agents from and against any and all claims, liability, damages, loss, obligations, suits, demands, costs, charges, fines, fees, penalties, interest and expenses (including reasonable attorney's fees) arising from Consultant's breach of the representations and warranties in this Agreement or Consultant's negligent acts or omissions in performing under this Agreement.

¹ Including, without limitation, laws pertaining to the employment of personnel and engagement of subcontractors, wage and hour rules, and other laws pertaining to labor and safety standards, and other laws applicable to Consultant in its conduct of business and performance hereunder.

c) UNLESS OTHERWISE PROVIDED IN THIS AGREEMENT, NEITHER PARTY (NOR ITS AFFILIATES, OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR ASSIGNS) WILL BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, PUNITIVE, SPECIAL, EXEMPLARY OR OTHER INDIRECT DAMAGES, INCLUDING, BY WAY OF EXAMPLE AND NOT LIMITATION, LOSS OF BUSINESS, PROFITS, OR OTHER ECONOMIC ADVANTAGE, WHETHER BY STATUTE, IN TORT, OR IN CONTRACT, EVEN IF A PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, THAT EXPRESS REMEDY OR MEASURE OF DAMAGES WILL BE THE EXCLUSIVE REMEDY OF THE PARTIES AND THE SOLE LIABILITY OF EACH. OTHERWISE, EACH PARTY'S LIABILITY HEREUNDER WILL BE LIMITED TO THREE (3) TIMES THE ACTUAL DIRECT DAMAGES PAID TO CONSULTANT BY EDF IN CONNECTION WITH THE CLAIM OR CONTESTED SERVICE OVER THE PRECEDING TWELVE (12) MONTHS FROM THE TIME THE EVENT RESULTING IN LIABILITY OCCURS. THE FORGOING LIMITATIONS DO NOT APPLY TO CLAIMS FOR NON-COMPLIANCE WITH LAW, BREACH OF CONFIDENTIALITY PROVISIONS OR THIRD-PARTY CLAIMS SUBJECT TO INDEMNIFICATION.

d) Neither Party will be liable for any loss, damage or delay resulting from any cause(s) beyond its reasonable control that materially interfere with a Party's performance (a "Force Majeure Event"), and each Party will be excused from performance of its obligations during the period of such interference.

9. Relationship of the Parties. Nothing in this Agreement shall be construed as establishing between EDF and Consultant a joint venture, employer-employee or any other relationship other than that of an independent contractor. Consultant has no authority, and shall not hold itself out as having authority, to bind EDF; Consultant shall not make any agreements or representations on EDF's behalf without EDF's prior written consent. Consultant will not be eligible to participate in any vacation, group medical or life insurance, disability, profit sharing or retirement benefits or any other fringe benefits or benefit plans offered by EDF to its employees, and EDF will not be responsible for withholding or paying any income, payroll, Social Security or other federal, state or local taxes, making any insurance contributions, including unemployment or disability, or obtaining worker's compensation insurance on Consultant's behalf. Consultant will render every assistance to EDF in proving to the relevant tax authorities that there is no obligation for EDF to withhold and remit wage tax and social insurance contributions/premiums in connection with this agreement.

10. Record Maintenance and Inspection. Consultant shall make its books and records related to this Agreement available for inspection for a period of four (4) years after completion of this Agreement by EDF or its assignee. Consultant shall maintain and make available for inspection records, which shall include, but not be limited to, accounting records, expenditures, written policies and procedures; subcontract files, and all copies of any financial reports submitted to EDF. Contractor shall at any time requested by EDF or its assignee, whether during or after completion of this Agreement, and at Contractor's own expense, make such records available for inspection and audit (including copies and extracts of records as required) by EDF or its assignee at a time and location that is convenient for EDF during normal business hours.

11. Termination

- a) Either party may terminate this Agreement if the other party breaches any material obligation provided hereunder and the breaching party fails to cure such breach within fifteen (15) days from receipt of notice of the breach. If such breach is not cured within such time period, then the non-breaching party may immediately terminate this Agreement by providing written notice to the other party. If Consultant breaches this Agreement, EDF reserves the right to withhold payment of any amounts due to Consultant until such breach is cured or this Agreement is terminated.
- b) EDF may terminate this Agreement at any time upon ten (10) days' prior written notice for any reason. Upon giving or receiving notice of termination under this clause, Consultant shall make good faith efforts to avoid incurring additional expenses, and EDF shall pay Consultant the fees due in respect of Services performed up to the date of termination on a pro-rated basis.
- c) In the event that EDF believes, in good faith, that Consultant or anyone acting on its behalf has acted or failed to act in any way that (i) may breach any of the provisions in Section 6 or any of the representations and warranties in Section 7 or (ii) is reasonably likely to materially damage EDF's brand or reputation, EDF shall have the unilateral right, exercisable upon written notice to Consultant, to immediately terminate the Agreement.
- d) Upon the termination of this Agreement for any reason or the completion of the provision of Services, whichever is earlier, Consultant shall immediately deliver to EDF all Work Product prepared for or in connection with this Agreement and all materials provided to Consultant by EDF.
- e) The terms and conditions of Sections 4, 5, 8, 10 and 12 shall survive the expiration or termination of this Agreement.

12. Miscellaneous

- a) Consultant is being hired for particular expertise and shall not assign or subcontract this Agreement or any of its rights or obligations hereunder without the prior written consent of EDF and, even if approved, Consultant shall be solely responsible for the act or omissions of any permitted subcontractors and for ensuring EDF obtains all rights to the Work Product as contemplated herein.
- b) No waiver or modification of any of the terms of this Agreement shall be valid unless in writing and signed by both parties. No waiver by either party of a breach hereof or a default hereunder shall be deemed a waiver by such party of a subsequent breach or default of like or unlike or similar or dissimilar nature.
- c) If any term or provision of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining terms and provisions shall not in any way be affected or impaired thereby and shall be valid and enforced to the fullest extent permitted by law.

- d) This Agreement shall be governed by and construed in accordance with the laws of the State of New York without giving effect to any conflict of laws principles under New York law. Each party submits to the exclusive jurisdiction and venue of the federal and state courts located in the State of New York in any action or suit in connection with the Agreement.
- e) This Agreement, along with any schedules, exhibits or attachments hereto, contains the sole and entire agreement and understanding of the parties with respect to the subject matter hereof, superseding all prior communications whether written or oral. Any conflict among or between the terms and conditions of the documents making up this Agreement shall be resolved based on the following order of precedence: (i) this Agreement; (ii) any exhibit, attachment, addenda, etc.; (iii) other non contractual documentation (e.g., invoices, email communications, etc.).
- f) This Agreement may be executed in one or more counterparts, but all of which together shall constitute one and the same instrument. This Agreement may be executed by manual or facsimile signature, each of which shall be deemed an original.

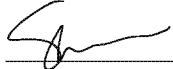
[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the Effective Date.

Environmental Defense Fund, Incorporated

By: _____
Name: Rolla Salem
Title: AVP, Healthy Communities

Marine Taxonomic Services, Ltd.

By:  _____
Name: Seth Jones
Title: President, CEO

Attachment A: Proposal from Marine Taxonomic Services Proposal to EDF



Tom Neltner
Senior Director, Safer Chemicals
Environmental Defense Fund
1875 Connecticut Ave., NW
Washington, DC 20009

March 19, 2022

Re: Abandoned Cable Validation, Investigation and Water Quality Testing

Dear Tom:

In follow up to our conversation, below please find a partnership proposal for Environmental Defense Fund (EDF) to fund an investigation and accompanying research of submarine telecommunication cables.

Scope of Investigation & Research

Over a multi-year period, Marine Taxonomic Services (MTS) has identified a number of abandoned submarine telecommunication cables in major fresh waterways, including those sourced for utilities. MTS subsequently tested a portion of these cables and confirmed the presence of lead. Subsequently, MTS personnel engaged a variety of parties in preliminary investigative work, confirming that there are potentially a significant number of these cables across the U.S. Furthermore, research confirmed that the use of lead was common prior to the 1980s in similar submarine telecommunications infrastructure.

MTS seeks funding to investigate 6 regions across the U.S. and perform research including but not limited to the composition of cables and water quality associated with the presence of cables.

The regions would include West (California), Northwest (Oregon), Midwest (Michigan), New England (Massachusetts), Mid-Atlantic (Pennsylvania) and South (Georgia),

This proposal would not include any litigation services, independent testing, nor ongoing site visits. MTS will not make its findings public upon completion. Furthermore, it would aim to build consensus of partners and provide proper notice before any distribution.

Overall, the scope of work can be separated into 4 activities:

1. Planning & Data Review
2. Cable Location Validation
3. Water Testing
4. Data Compilation & Reporting

MAIN OFFICE | 920 RANCHEROS DRIVE SUITE F-1 | SAN MARCOS CA 92069 | 760.410.8382
OREGON OFFICE | 5125 NW CRESCENT VALLEY DRIVE | CORVALLIS OR 97330 | 558.232.1958
SOUTH LAKE TAHOE | 1155 GOLDEN BEAR TRAIL | SOUTH LAKE TAHOE CA 96150 | 558.232.1958

WWW.MARINETAXONOMICSERVICES.COM

Cost Projections & Proposal

MTS performs these activities on a regular basis for its commercial business. Specific details on the nature of these activities are provided in the next section.

Projected Cost Summary		
1. Planning & Data view (total)	\$	7,282
2. Cable Location Validation (per region)	\$	14,973
3. Testing (EDF direct)	\$	-
4. Data Compilation & Testing (per region)	\$	4,840
Projected Total (assuming 8 regions)	\$	124,960
Proposed Total (assuming 8 regions)	\$	85,000

Given the critical nature of the investigation, MTS is prepared to offer its services at cost to expedite the timeline and demonstrate its commitment to raising awareness. MTS previously conducted investigative work in the Northwest (Oregon) that could also be leveraged to bring costs down. Mobilization and field costs will vary slightly by location due to variable direct costs, but MTS is willing to further offset to facilitate this project in a timely manner.

In total, MTS would propose ~\$15,000 per region for a total of \$85,000. Reducing the number of regions or sites within regions could be used as a mechanism to lower the price further if funding is limited.

Activity Breakdown

1 – Planning & Data Review

Under this task, Marine Taxonomic Services, Ltd. (MTS) will receive information from existing partners relative to the possible location of abandoned utility cables that may contain lead. MTS will create field maps and data sheets as well as arrange all needed supplies and logistics so that field teams are prepared to search for the cables efficiently.

Time will be spent coordinating with existing partners, developing field maps, and preparing equipment for fieldwork.

Task 2 – Cable Location Validation

Under this task, MTS will perform a site visit of potential cable locations, confirm if the cables are in place or have been removed, and determine composition relative to whether or not the cables contain lead. To the extent practicable, MTS will map the location of the cables within the respective water body. Cost to complete this task are expected to vary by region. The typical budget to complete this task is anticipated to be per region surveyed.

Task 3 – Water Testing

Under this task, MTS will provide water samples to the recommended analytical laboratories to test the lead content of water bodies where cables are identified. Samples will be collected along

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 OREGON OFFICE | 5125 NW CRESCENT VALLEY DRIVE | CORVALLIS OR 97330 | 888.232.1858
 SOUTH LAKE TAHOE | 1155 GOLDEN BEAR TRAIL | SOUTH LAKE TAHOE CA 96150 | 888.232.1958
 WWW.MARINETAXONOMICSERVICES.COM

a gradient relative to distance from the cable to determine if the cable or cables act as a source of lead contamination for the water body. The sampling plan will be refined with direction from the EDF.

As discussed the cost to complete the lead testing will be invoiced by the laboratory directly to the EDF. The time associated with management of samples is covered under Task 2.

Task 4 – Data Compilation & Reporting

Under this task, MTS will compile the site visit data and the water testing data to produce a brief report that provides the results of the location and testing data. MTS will provide a map that shows the location of any identified cable route along with the results of the water quality data.

Completing this task includes time for a mapping GIS technician to compile data and create figures as well as time for staff members to write a memo outlining the survey methods and results.

Commitment & Data Usage

If MTS obtains funding, we could complete full investigations at the key locations identified as well as going back to Oregon and collecting water samples. MTS can provide a dedicated team to perform these crucial investigations within two weeks of a notice to proceed during this time of year. The summer and fall are busy times for field sampling. So, it is ideal for staffing reasons to do this work ASAP as long as weather permits. We would plan around river flows and weather to maximize efficiency in the field. If funded by the end of March, MTS could have all the field sampling done by the end of May and other deliverables completed by the end of June.

Previously, the Wall Street Journal expressed interest in the ongoing research MTS intended to perform. As such, MTS would plan to provide all data, reports, maps, and project photos to the EDF and Wall Street Journal.

We would look forward to any opportunity to collaborate with you on this project.

Sincerely,

Seth Jones
President and Principal Scientist

EXHIBIT 4

From: Seth Jones [seth@consultmts.com]
Sent: 8/15/2023 6:24:16 PM
To: Riley Day [rday@edf.org]
CC: Tokë Vandervoort [tvandervoort@edf.org]; Tom Neltner [tneltner@edf.org]; Monique Rydel-Fortner [monique@consultmts.com]; Freeman, Alan [alan.freeman@blankrome.com]
Subject: Re: [EXTERNAL] Re: AT&T Subpoena

Hey! We can make tomorrow's time slot work.

Sent from my iPhone

On Aug 15, 2023, at 10:02 AM, Riley Day <rday@edf.org> wrote:

Hi Seth and Monique,

See below Toke's availability in EST for the rest of the week and let me know what works for you.

8/16: 2-2:30pm
8/17: 12:30-2pm
8/18: 12-4pm

Best,
Riley

From: Tokë Vandervoort <tvandervoort@edf.org>
Sent: Tuesday, August 15, 2023 1:01 PM
To: Seth Jones <seth@consultmts.com>
Cc: Tom Neltner <tneltner@edf.org>; Monique Rydel-Fortner <monique@consultmts.com>; Freeman, Alan <alan.freeman@blankrome.com>; Riley Day <rday@edf.org>
Subject: RE: [EXTERNAL] Re: AT&T Subpoena

Today is pretty jammed here. Do you have a few times later in the week?
Also, please do not share any documents at this time.
If you have engaged counsel, though, it would be helpful to know whom.
More when we talk.

Tokë

Tokë Vandervoort
Chief Legal Officer
Environmental Defense Fund
Washington, DC
M 703-856-3026

From: Seth Jones <seth@consultmts.com>
Sent: Tuesday, August 15, 2023 12:47 PM
To: Tokë Vandervoort <tvandervoort@edf.org>
Cc: Tom Neltner <tneltner@edf.org>; Monique Rydel-Fortner <monique@consultmts.com>; Freeman, Alan <alan.freeman@blankrome.com>; Riley Day <rday@edf.org>
Subject: [EXTERNAL] Re: AT&T Subpoena

Hi all!

Nice to meet at well. We have time today from 10:15-12 or 1-4 PST if that works at all. Do you want copies of our Subpoenas via email?

Thanks Seth

Sent from my iPhone

On Aug 15, 2023, at 7:02 AM, Tokë Vandervoort <tvandervoort@edf.org> wrote:

Thanks for the intro Tom

Nice to e-meet you both.

I'm adding my assistant Riley who can help us find a good time to connect by the end of this week.

I believe you both are on Pacific time, but if there are times of day that you are sure to be available please let us know. We do want to make this happen soon.

Looking forward to our conversation.

Thanks

Tokë

Tokë Vandervoort
Chief Legal Officer
Environmental Defense Fund
Washington, DC
M 703-856-3026

From: Tom Neltner <tneltner@edf.org>

Sent: Tuesday, August 15, 2023 9:09 AM

To: Seth Jones <seth@consultmts.com>; Monique Rydel-Fortner <monique@consultmts.com>

Cc: Freeman, Alan <alan.freeman@blankrome.com>; Tokë Vandervoort <tvandervoort@edf.org>; Tom Neltner <tneltner@edf.org>

Subject: AT&T Subpoena

Seth and Monique,

I would like to introduce you to Tokë Vandervoort, EDF's general counsel, and Alan Freeman, the BlankRome attorney who is representing EDF in handling the subpoena's from AT&T/Pacific Bell. I have worked with both for the past couple of years, and they are great.

Tokë and Alan,

Seth and Monique are the key people on the project representing Marine Taxonomic Services, our contractor. They are also the key people at Below the Blue, our community-based ally on this effort.

Tom

Tom Neltner
Senior Director, Safer Chemicals
tneltner@edf.org ...
C 317-442-3973
O 202-572-3263

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<image001.png>

EXHIBIT 5

From: Joshua Koltun <joshua@koltunattorney.com>

Date: November 24, 2023 at 3:43:52 PM CST

To: navidhillon@paulhastings.com, "Karis, Hariklia" <hkaris@kirkland.com>, "Nomellini, Mark J." <mnomellini@kirkland.com>, jkelley@kirkland.com

Subject: California Sportfishing Protection Alliance v. Pacific Bell Telephone Company -- Beyond the Blue subpoena

This message is from an EXTERNAL SENDER

Be cautious, particularly with links and attachments.

Dear Messrs. Dhillon, Nomellini, and Kelley and Ms. Karis:

I have been engaged to represent Below the Blue (BtB), Marine Taxonomic Services LLP(MTS) Seth Jones and Monique Rydel-Fortner regarding the discovery sought in *California Sportfishing Protection Alliance v. Pacific Bell Telephone Company* (ED Cal).

I assume that the identical, duplicative subpoenas, including that to MTS in the Southern District, are simply efforts by AT&T to make sure it has covered its bases. I propose to consolidate all these discovery disputes in the Eastern District. For simplicity's sake, in this email, I will refer to all these persons and entities as "BtB." I don't anticipate making any arguments distinguishing between corporate entities, or between corporate or individual access to documents or things. Lets get straight to the heart of the dispute.

I first communicated with BtB on Wednesday, the day before Thanksgiving, and am trying to get on top of this case as quickly as I can. I fully understand how frustrating it has been for you to face delays that have been entailed by BtB's inability to obtain counsel. But as you are aware and acknowledged to the Court, that is the result of an ongoing saga in which the Vance Center has found counsel apparently willing to represent BtB, only to have those firms decline or withdraw such representation. BtB has at all times acted in good faith in seeking to find counsel, and now has found it (me).

Until now, in the absence of counsel, Seth Jones was (i) not competent to fully flesh out and meet and confer on the objections to discovery that he stated on August 23, and (ii), as the Court noted, barred by law from appearing and representing BtB by way of opposition to your motion or, for that matter, to engage in the Court's informal procedures for resolving discovery disputes. That being the case, I would propose that we enter into an expedited process whereby I will shortly present formal discovery responses to the subpoenas, and then we would expeditiously meet and confer in an

Alternatively, if AT&T is unwilling to meet and confer on the substance of the underlying discovery, I would propose to move the Court to reconsider its ruling on the motion to compel. As I understand matters, we would need to meet and confer on that proposed motion and then present it to the court under its informal procedures first. I would be surprised if under the circumstances the Court is not willing to allow BtB to renew the underlying discovery dispute now that it has obtained counsel. I think that this alternative step would needlessly complicate and delay matters, which is the opposite of what I am trying to accomplish. So let me know if you will stipulate to skipping that procedural step and go straight to meeting and conferring on the underlying discovery dispute on an expedited basis.

Either way, lets meet and confer. I realize that I am writing you during a holiday weekend and I have no desire to interfere with your enjoyment of it. But if you wish, I can make myself available to discuss this over the weekend. Similarly, insofar as we may be discussing the scheduling of discovery meet/confer and/or motion practice (formal or informal or both), I can be available to work over the upcoming Christmas/New Year holidays, but am also happy to accommodate your own holiday plans.

Best regards. I look forward to hearing from you.

Joshua Koltun ATTORNEY

One Sansome Street
Suite 3500, No. 500
San Francisco, CA 94104

415.680.3410
866.462.5959 fax
joshua@koltunattorney.com

EXHIBIT 6

Fwd: contact information

1 message

Kirk Boyd <kirk@erlives.org>

Tue, Aug 1, 2023 at 3:30 PM

To: Gordon Binkhorst <gbinkhorst@gmail.com>

Hello Gordon,

Please pardon that I am forwarding an email I just sent from my law firm account. For some reason an IT person will figure out, mail sent to gmail addresses, but not others, is being bounced this morning. We'll get it figured out, and I want to make sure that this email goes through to you.

You can continue to send email to me at jkb@drjkb.com

Best,

Kirk

Begin forwarded message:

From: jkb acct <jkb@drjkb.com>

Subject: Re: contact information

Date: August 1, 2023 at 12:25:06 PM PDT

To: Gordon Binkhorst <gbinkhorst@gmail.com>

Hello Gordon,

Thank you for this quick follow up, and for talking with me today. As we have discussed, our goal working together, and throughout the assessment of evidence and presentation of that info throughout this case, is to "let science be the guide." We have an excellent Judge, and I'm confident that he too will let science be the guide.

As we pursue that goal, I appreciate that you will work with us consulting at \$150 an hour with an understanding that should you be deposed or testify at trial, that amount will increase to \$225 an hour for that work. Also, I appreciate the conversation that we previously had was our initial contact, and consider that to be preliminary without pay. But as for today, we have begun working together, and your rate of \$150 an hour is included for the phone conversation that we just had.

I will send you a more formal written retention letter as an expert, but for the time being please keep track of the time you spend and submit a summary of your time spent on this matter every two weeks. It's best if your time summaries include the date and a very brief general description of the type of work you are doing. You can simply have a long list of entries to which you add more, and send to me every couple of weeks. If you choose to use a more formal billing software, that's fine too, but I am not asking for an extensive description of your work. I know that keeping time records is taxing, and your time is best spent using your expertise to figure out exactly what the science is with these cables leaching lead into Lake Tahoe.

I look forward to our continued working together.

Best,

Kirk

Law Office of John Kirk Boyd

548 Market St., Suite 1300

San Francisco, CA 94104

415 690 6687

On Aug 1, 2023, at 11:41 AM, Gordon Binkhorst <gbinkhorst@gmail.com> wrote:

—
Gordon K. Binkhorst, PhD
300 Farm Street
West Hartford, CT 06110
phone 860-572-6288

EXHIBIT 7

Lake Tahoe Results

1 message

Gordon Binkhorst <gbinkhorst@gmail.com>

Tue, Sep 12, 2023 at 12:10 PM

To: Kirk Boyd <kirk@erlives.org>

Kirk:

Please find the attached report summarizing the investigation into the lead sheathed cables done by Marine Taxonomic Services/Beyond the Blue for the EDF, including their work in Lake Tahoe. I am also attaching the four referenced "California Data Collection-Final" reports that detail the sample collection activities and location in Lake Tahoe.

Happy to discuss, Gordon

 [20230330_California Data Collection - Final.pdf](#)

 [20230331_California Data Collection - Final.pdf](#)

 [20230505_California Data Collection - Final.pdf](#)

 [20230506_California Data Collection - Final.pdf](#)

 [MTS_EDF Lead Cable Investigation_Final.pdf](#)

--
GORDON K. BINKHORST
MARINE TAXONOMIC SERVICES
WEST HARTFORD, CT 06119
CELL 783-553-8588

EXHIBIT 8

Lake Tahoe Results

1 message

Gordon Binkhorst <gbinkhorst@gmail.com>

Tue, Sep 12, 2023 at 12:23 PM

To: Kirk Boyd <kirk@erlives.org>

Kirk:


I had sent you the Pace Analytical results from the Lake Tahoe samples earlier.

At your request, I have tabulated the data for you. You'll see an "Results A" version showing the results in the order of the lab reports, and a "Results B" version sorted by sample type (e.g., sediment, water) and then by concentration.

Happy to discuss, Gordon

Gordon Binkhorst
10000 1st St.
Lake Tahoe, CA 96145
Cell: 530-573-4028

2 attachments

 **Lake Tahoe Results B - DRAFT.pdf**
41K


 **Lake Tahoe Results A - DRAFT.pdf**
42K

EXHIBIT 9

1 ANDREW L. PACKARD (State Bar No. 168690)
2 WILLIAM N. CARLON (State Bar No. 305739)
3 LAW OFFICES OF ANDREW L. PACKARD
4 245 Kentucky Street, Suite B3
5 Petaluma, CA 94952
6 Tel: (707) 782-4060
7 Fax: (707) 782-4062
8 andrew@packardlawoffices.com
9 wncarlon@packardlawoffices.com

6 WILLIAM VERICK (State Bar No. 140972)
7 KLAMATH ENVIRONMENTAL LAW CENTER
8 1125 16th Street, Suite 204
9 Arcata, CA 95521
10 Tel: (707) 630-5061
11 Fax: (707) 630-5064
12 Email: wverick@igc.org

10 J. KIRK BOYD (State Bar No. 122759)
11 LAW OFFICE OF JOHN KIRK BOYD
12 548 Market St., Suite 1300
13 San Francisco, CA 94104-5401
14 Tel: (415) 440-2500
15 jkb@drjkb.com

13 Attorneys for Plaintiff
14 CALIFORNIA SPORTFISHING
15 PROTECTION ALLIANCE

16 UNITED STATES DISTRICT COURT
17 EASTERN DISTRICT OF CALIFORNIA
18

19 CALIFORNIA SPORTFISHING
20 PROTECTION ALLIANCE,

21 Plaintiff,

22 v.

23 PACIFIC BELL TELEPHONE COMPANY,

24 Defendant.
25
26
27
28

CASE NO. 2:21-cv-00073-MCE-JDP

**PLAINTIFF'S RESPONSES TO
DEFENDANT'S FIRST SET OF
INTERROGATORIES TO PLAINTIFF**

RESPONSES TO INTERROGATORIES

INTERROGATORY NO. 1:

Describe in detail all testing conducted by YOU concerning the CABLES.

RESPONSE TO INTERROGATORY NO. 1:

Plaintiff objects to the extent that the request seeks information protected by an attorney client privilege or constitutes attorney work product. Plaintiff further objects that although this action was filed some time ago, until a few weeks ago plaintiff understood that this action had settled pending and conditioned only upon defendant obtaining required permits for cable removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all rights to augment and supplement responses. Plaintiff further objects that the request is vague and ambiguous in its use of the undefined word “testing,” in its lack of time specification, and its use of the undefined phrase “conducted by YOU” since it is unclear as to whether that phrase includes knowledge of ‘testing’ done by third parties. Plaintiff further objects that the subject of this request or interrogatory is properly the subject of expert testimony, calls for premature disclosure of expert opinions, and responses will be provided to properly promulgated expert discovery.

Without waiving these objections and subject to them, Plaintiff responds as follows.

Prior to this action being filed, attorneys for Plaintiff obtained a piece of cable which attorneys for Plaintiff are informed and believe was removed from the disconnected end of Defendant’s cable in Lake Tahoe some years before. The water that was used for testing the discharge of lead was taken directly from Lake Tahoe. A piece of the Cable approximately 40 centimeters in length was submerged in a plastic container of Lake Tahoe water. A sample was taken of the water after one day. A second sample of the water was taken after seven days. These samples, as well as a

1 sample blank of the Lake Tahoe water prior to the placement of the Cable, were provided to a
2 certified lab for analysis of lead content. The analysis of sample blank showed no detection of
3 lead in the water. The analysis of the sample taken after the cable had been submerged in the
4 Lake Tahoe water for one day showed a concentration of 650 micrograms of lead per liter of
5 water, and analysis of the sample after one week showed that enough lead had continued to be
6 dissolved from the Cable to raise the concentration of lead in the water to 1,500 micrograms per
7 liter. A copy of the laboratory report of this concentration has been or will be provided as part of
8 the document production requested by Defendant. The length of Cable and plastic container used
9 in this sample collection are in the custody of counsel for Plaintiff and can be arranged so that
10 Defendant can inspect them. Plaintiff is informed and believes that further testing of the Cable
11 and of Lake Tahoe water and soil in proximity to the Cable has been tested by third parties.

12
13
14 **INTERROGATORY NO. 2:**

15 IDENTIFY each of YOUR members who YOU contend has been injured due to the
16 CABLES, and for each member identified, describe the nature, extent, and alleged cause of the
17 injury.

18 **RESPONSE TO INTERROGATORY NO. 2:**

19 Plaintiff objects to the extent that the request seeks information protected by an attorney
20 client privilege or constitutes attorney work product. Plaintiff further objects that although this
21 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
22 settled pending and conditioned only upon defendant obtaining required permits for cable
23 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
24 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
25 rights to augment and supplement responses. Plaintiff further objects that the request is vague and
26 ambiguous in its use of the undefined phrase “has been injured”, and also in its lack of time
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28

1 specification. Plaintiff further objects that the subject of this request or interrogatory is properly
2 the subject of expert testimony, calls for premature disclosure of expert opinions, and responses
3 will be provided to properly promulgated expert discovery. Plaintiff objects to the disclosure of
4 its individual members' personal information. *See NAACP v. Alabama ex rel. Patterson*, 357 U.S.
5 449, 462 (1958).
6

7 Without waiving these objections and subject to them, Plaintiff responds as follows.
8 All of Plaintiff's members have been injured due to the CABLES. Lake Tahoe is a unique
9 environmental treasure. The discharge of lead into Lake Tahoe is harmful to the lake and its
10 environ. The injury to the lake caused by the Cable is injurious to all citizens of California and
11 particularly those who fish, swim, or travel by the lake, or drink water from the Lake.
12

13 **INTERROGATORY NO. 3:**

14 State all facts supporting any injuries YOU contend YOU have suffered due to the
15 CABLES.

16 **RESPONSE TO INTERROGATORY NO. 3:**

17 Plaintiff objects to the extent that the request seeks information protected by an attorney
18 client privilege or constitutes attorney work product. Plaintiff further objects that although this
19 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
20 settled pending and conditioned only upon defendant obtaining required permits for cable
21 removal. A few weeks ago Defendants withdrew that agreement, and the litigation of this case
22 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
23 rights to augment and supplement responses. Plaintiff further objects that the request is vague
24 and ambiguous in use of the phrase "injuries", also in its lack of time specification. Plaintiff
25 further objects that the subject of this request or interrogatory is properly the subject of expert
26 testimony and responses will be provided to properly promulgated expert discovery.
27
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1 Without waiving these objections and subject to them, Plaintiff responds that Lake Tahoe
2 is a unique environmental treasure. The Cable discharges lead into Lake Tahoe. The discharge
3 of lead into Lake Tahoe is harmful to the Lake and its environ. The injury to the lake caused by
4 the discharge of lead is injurious to water quality, the soil quality and the aquatic life of the lake.
5 All citizens of California and particularly those who fish, swim, or travel by the lake, or drink
6 water from the Lake are injured by the harm done to the lake. The details of the harm to the lake
7 are properly the subject of expert testimony.
8

9 **INTERROGATORY NO. 4:**

10 State all facts supporting YOUR allegation that lead dissolved from the CABLES is
11 distributed throughout Lake Tahoe and its larger environment.
12

13 **RESPONSE TO INTERROGATORY NO. 4:**

14 Plaintiff objects to the extent that the request seeks information protected by an attorney
15 client privilege or constitutes attorney work product. Plaintiff objects that although this action
16 was filed some time ago, until a few weeks ago plaintiff understood that this action had settled
17 pending and conditioned only upon defendant obtaining required permits for cable removal. A
18 few weeks ago, Defendants withdrew that agreement, and the litigation of this case began.
19 Accordingly, the matter is at a very early stage of the litigation and plaintiff reserves all rights to
20 augment and supplement responses. Plaintiff objects that the subject of this request or
21 interrogatory is properly the subject of expert testimony, it calls for premature disclosure of
22 expert testimony, and responses will be provided to properly promulgated expert discovery.
23 Without waiving these objections and subject to them, information responsive to these this
24 Interrogatory is contained in the facts stated in the answer to Interrogatory No. 1, above, which is
25 incorporated by reference here. Additionally, it is the common experience of most people that
26 substances introduced into a larger liquid body get mixed and dispersed into and throughout that
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1 body of liquid if the substance introduced is in dissolved form or in the form of tiny particles.
2 That this mixing and dispersion is enhanced if there is agitation in the form of a coffee spoon or
3 swizzle stick stirred, or current or wave action in a larger body of liquid, such as a river, lake or
4 ocean. This experience is as common as putting cream into coffee, gin into vermouth, chlorine
5 into a swimming pool or detergent into a washing machine. Finally, the details and precise
6 mechanisms and process by which lead once in the water of the Lake is distributed throughout the
7 Lake, is properly the subject of expert testimony.
8

9 **INTERROGATORY NO. 5:**

10 State all facts supporting YOUR allegation that dermal exposure to lead from the
11 CABLES has harmed individuals who make physical contact with the water of Lake Tahoe.
12

13 **RESPONSE TO INTERROGATORY NO. 5:**

14 Plaintiff objects to the extent that the request seeks information protected by an attorney
15 client privilege or constitutes attorney work product. Plaintiff further objects that although this
16 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
17 settled pending and conditioned only upon defendant obtaining required permits for cable
18 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
19 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
20 rights to augment and supplement responses. Plaintiff further objects that the request is vague and
21 ambiguous in use of the undefined term harmed individuals and is vague and ambiguous in terms
22 of time frame regarding exposure, and injury. Plaintiff further objects that the subject of this
23 request or interrogatory is properly the subject of expert testimony, prematurely calls for the
24 disclosure of expert opinions, and responses will be provided to properly promulgated expert
25 discovery. Finally, Plaintiff objects to this request as it is irrelevant to Plaintiff's claims and any
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1 defense available to Defendant and misstates Plaintiff's allegations. See *Price v. United States*
2 *Navy*, 39 F.3d 1011, 1019 (9th Cir. 1994).

3 Without waiving this objection, lead in the cables is discharging into the water of Lake
4 Tahoe. People, fish, aquatic plants and other living things come into contact with the lead in the
5 water when they are in the water. Large reviews of toxicological and industrial hygiene literature
6 by the Environmental Protection Agency (EPA), the Agency for Toxic Substances and Disease
7 Registry, and the Occupational Safety and Health Administration have concluded that lead has
8 toxic effects on several toxicological endpoints, including development of the central nervous
9 system, and that these toxic effects occur at extremely low levels of exposure. To the extent it is
10 relevant, the details of health consequence of dermal exposure to lead is properly the subject of
11 expert testimony
12

13
14 **INTERROGATORY NO. 6:**

15 State all facts supporting YOUR allegation that dissolved lead from the CABLES is
16 ingested by humans when they drink water from Lake Tahoe.

17 **RESPONSE TO INTERROGATORY NO. 6:**

18 Plaintiff objects to the extent that the request seeks information protected by an attorney
19 client privilege or constitutes attorney work product. Plaintiff further objects that although this
20 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
21 settled pending and conditioned only upon defendant obtaining required permits for cable
22 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
23 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
24 rights to augment and supplement responses. Plaintiff further objects that the request is vague
25 and ambiguous because it does not specify a time frame to which the Interrogatory refers.
26

27 Plaintiff further objects that the subject of this request or interrogatory is properly the subject of
28

1 expert testimony, prematurely calls for the disclosure of expert witness opinions. Plaintiff will
2 provide responses to properly promulgated expert discovery. Without waiving this objection and
3 subject to it, lead is discharged into the lake from the cable. Information responsive to this
4 Interrogatory is contained in Plaintiff's response to Interrogatory No. 1, above, which is
5 incorporated by reference here. Humans ingest the lead when they ingest the water. The details
6 of this ingestion and its toxicological consequences, are properly the subject of expert testimony.
7

8 **INTERROGATORY NO. 7:**

9 State all facts supporting YOUR allegation that dissolved lead from the CABLES is
10 ingested by humans when they eat fish caught in Lake Tahoe.

11 **RESPONSE TO INTERROGATORY NO. 7:**

12 Plaintiff objects to the extent that the request seeks information protected by an attorney
13 client privilege or constitutes attorney work product. Plaintiff objects that although this action
14 was filed some time ago, until a few weeks ago Plaintiff understood that this action had settled
15 pending and conditioned only upon defendant obtaining required permits for cable removal. A
16 few weeks ago, Defendants withdrew that agreement, and the litigation of this case began.
17 Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all rights to
18 augment and supplement responses. Plaintiff objects that the term "dissolved lead" is vague and
19 ambiguous. Lead can enter and travel throughout waterbodies in many forms, only one of which
20 is in a state of dissolution. Lead can be adsorbed onto tiny particles such as soil, sediment or
21 plant matter, and then be suspended in the water column for indeterminate periods of time.
22 Plaintiff further objects that the subject of this Interrogatory is properly the subject of expert
23 testimony, and therefore prematurely calls for the disclosure of expert witness opinions.
24 Responses will be provided to properly promulgated expert discovery. Without waiving this
25 objection and subject to it, lead is discharged from the cable into the water of the lake. The fish
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1 of the lake are in constant contact with the water of the lake which the fish ingest and pass
2 through their gills to breathe. Lead is deposited in the fish through this ingestion and 'breathing.'
3 Progressive exposure to lead causes lead to bioaccumulate in the fish. People ingest lead when
4 they ingest the fish that have bioaccumulated lead through exposure to lead in the lake water. The
5 details of this ingestion exposure is properly the subject of expert testimony.
6

7 **INTERROGATORY NO. 8:**

8 IDENTIFY all permits that YOU, including others acting on your behalf, have obtained to
9 remove CABLES from Lake Tahoe, including the date YOU applied for the permit, the date
10 YOU obtained the permit, and the entity that issued the permit.
11

12 **RESPONSE TO INTERROGATORY NO. 8:**

13 Plaintiff objects to the extent that the request seeks information protected by an attorney
14 client privilege or constitutes attorney work product. Plaintiff further objects that although this
15 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
16 settled pending and conditioned only upon defendant obtaining required permits for cable
17 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
18 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
19 rights to augment and supplement responses. Plaintiff further objects to the request because of its
20 implication that Plaintiff has removed Cable from the lake. Without waiving this objection and
21 subject to it, Plaintiff has neither sought nor received a permit to remove Cables from Lake Tahoe
22 and, therefore, has no permits to identify.
23

24 **INTERROGATORY NO. 9:**

25 State the current location of any CABLE removed from Lake Tahoe for testing by YOU.
26

27 **RESPONSE TO INTERROGATORY NO. 9:**
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1 Plaintiff objects to the extent that the request seeks information protected by an attorney
 2 client privilege or constitutes attorney work product. Plaintiff further objects that although this
 3 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
 4 settled pending and conditioned only upon defendant obtaining required permits for cable
 5 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
 6 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
 7 rights to augment and supplement responses. Plaintiff further objects to the request because of its
 8 implication that Plaintiff has removed Cable from the lake. Without waiving this objection and
 9 subject to it, Plaintiff possesses a portion of the CABLE and Defendant can make arrangements to
 10 inspect it at a location mutually agreeable to the parties.
 11

12 **INTERROGATORY NO. 10:**

13 State the current location of any kiddie pool used to test CABLE removed from Lake
 14 Tahoe.
 15

16 **RESPONSE TO INTERROGATORY NO. 10:**

17 Plaintiff objects to the extent that the request seeks information protected by an attorney
 18 client privilege or constitutes attorney work product. Plaintiff further objects that although this
 19 action was filed some time ago, until a few weeks ago Plaintiff understood that this action had
 20 settled pending and conditioned only upon defendant obtaining required permits for cable
 21 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
 22 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
 23 rights to augment and supplement responses. Plaintiff further objects to the term “kiddie pool” as
 24 vague and ambiguous; Plaintiff assumes for purposes of answering this request that Defendant
 25 refers to the container in which a portion of the Cable was tested. Without waiving this objection
 26 and subject to it, Plaintiff possesses the container in which a portion of the cable was tested.
 27
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INTERROGATORY NO. 11:

Describe in detail all tests that YOU performed on any lead-clad cables at any location, including the date of the test, the methodology used in the test, the location of the tested lead cables, any locations where the lead-clad cables were removed for testing, the personnel and entities involved in the tests, and any steps taken to replicate the conditions of the cables in their undisturbed state in Lake Tahoe or elsewhere.

RESPONSE TO INTERROGATORY NO. 11:

Plaintiff objects to the extent that the request seeks information protected by an attorney client privilege or constitutes attorney work product. Plaintiff further objects that although this action was filed some time ago, until a few weeks ago Plaintiff understood that this action had settled pending and conditioned only upon defendant obtaining required permits for cable removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all rights to augment and supplement responses. Plaintiff further objects that the request is vague and ambiguous in use of the word “tests” and is vague and ambiguous in its use of the phrase “YOU performed” as to whether that phrase includes knowledge of ‘testing’ done by third parties. Plaintiff further objects to this interrogatory as it is compound, seeking not only the details of tests Plaintiff performed, but for six different categories of information which are required to be separate interrogatories. Plaintiff further objects that the subject of this request or interrogatory is properly the subject of expert testimony, prematurely calls for disclosure of expert witness opinions, and responses will be provided to properly promulgated expert discovery.

Without waiving these objections and subject to them, Plaintiff has previously described the details of a test on a length of Cable placed in Lake Tahoe water in a plastic container in response to Interrogatory No. 1 and incorporates that response herein.

INTERROGATORY NO. 12:

Describe in detail all standards that YOU followed in testing lead-clad cables.

RESPONSE TO INTERROGATORY NO. 12:

Plaintiff objects to the extent the request seeks information protected by an attorney client privilege or constitutes attorney work product. Plaintiff further objects that although this action was filed some time ago, until a few weeks ago Plaintiff understood that this action had settled pending and conditioned only upon defendant obtaining required permits for cable removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all rights to augment and supplement responses. Plaintiff further objects that the request is vague and ambiguous in use of the word “tests” and “standards” and vague and ambiguous in its use of the phrase “YOU performed” as to whether that phrase includes knowledge of ‘testing’ done by third parties. Plaintiff further objects that the subject of this request or interrogatory is properly the subject of expert testimony and responses will be provided to properly promulgated expert discovery. Without waiving these objections and subject to them, Plaintiff has previously described the details of a test on a length of Cable placed in a plastic container in response to Interrogatory No. 1 and incorporates that response herein.

INTERROGATORY NO. 13:

Describe in detail any tests or studies on lead or lead-clad cables that YOU or your experts may rely on at trial, including the date of the tests or studies and the personnel and entities involved in the tests or studies.

RESPONSE TO INTERROGATORY NO. 13:

Plaintiff objects to the extent the request seeks information protected by an attorney client privilege or constitutes attorney work product. Plaintiff further objects that although this action

1 was filed more than two years ago, until a few weeks ago Plaintiff understood that this action had
2 settled pending and conditioned only upon defendant obtaining required permits for cable
3 removal. A few weeks ago Defendants withdrew that agreement, and the litigation of this case
4 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
5 rights to augment and supplement responses. Plaintiff further objects that the request is vague
6 and ambiguous in use of the words “tests” and “studies.” Plaintiff further objects that the subject
7 of this request or interrogatory is properly the subject of expert testimony, prematurely seeks
8 disclosure of expert witness opinions, and responses will be provided to properly promulgated
9 expert discovery. Without waiving this objection and subject to it, Plaintiff responds that the
10 request made in this interrogatory is premature. Tests are ongoing and expert analysis is
11 underway which will be provided to the Defendant in accordance with the rules applicable to
12 experts. Additionally, third parties have conducted tests or studies on lead or lead-clad cables.
13 Plaintiff may rely on some of these studies, even studies of which Plaintiff is not now aware.
14 Many such studies upon which Plaintiff may rely are described in documents that Defendant has
15 subpoenaed from third parties. Those studies, and their descriptions, are as available to
16 Defendant as they are to the Plaintiff and the best description of those studies is provided in the
17 documents Defendant either already possesses (or which Defendant soon will possess). Plaintiff
18 declines to provide additional descriptions of the tests and studies. Finally, the identity of the
19 tests and studies Plaintiff actually plans to rely on at trial is subject, at this time, to the attorney
20 work product doctrine and on that basis, Plaintiff declines to describe any such studies.

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24 **INTERROGATORY NO. 14:**

25 State all facts supporting the statement in YOUR August 6, 2020 letter attached as Exhibit
26 A to the COMPLAINT that CABLE D is “presently discharging lead into Lake Tahoe well
27 beyond established limits for safety,” including the total amount of lead discharged into Lake
28

1 Tahoe attributable to CABLE D.

2 **RESPONSE TO INTERROGATORY NO. 14:**

3 Plaintiff objects to the extent the request seeks information protected by an attorney client
4 privilege or constitutes attorney work product. Plaintiff further objects that although this action
5 was filed more than two years ago, until a few weeks ago Plaintiff understood that this action had
6 settled pending and conditioned only upon defendant obtaining required permits for cable
7 removal. A few weeks ago, Defendants withdrew that agreement, and the litigation of this case
8 began. Accordingly, the matter is at a very early stage of the litigation and Plaintiff reserves all
9 rights to augment and supplement responses. Plaintiff objects to this request as it is improperly
10 compound. Plaintiff objects as it seeks information that is not relevant to Plaintiff's claims or
11 Defendant's potential defenses.
12

13
14 Without waiving these objections and subject to them, Plaintiff responds that CABLE D
15 was owned and operated by Sierra Pacific Power Company and Liberty Utilities (collectively
16 hereinafter "Calpeco Electric"). At some point, Plaintiff learned that CABLE D was not a
17 telecommunications cable, that it was an electric power cable. Plaintiff had named Calpeco
18 Electric as a defendant in the initial complaint filed in this action. More than two years ago,
19 Calpeco Electric's counsel presented evidence to Plaintiff demonstrating that CABLE D did not
20 contain any lead. Accordingly, Plaintiff promptly dismissed Calpeco Electric as a defendant in
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1 this case. Plaintiff therefore, has no information to provide that would be responsive to this
2 Interrogatory.

3 Respectfully submitted,
4

5 DATED: September 20, 2023

KLAMATH ENVIRONMENTAL LAW
CENTER

6
7
8 By 

William Verick

9 Attorney for Plaintiff
10 CALIFORNIA SPORTFISHING
11 PROTECTION ALLIANCE
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PROOF OF SERVICE

I am a citizen of the United States of America and work in City of Arcata, California. I am over the age of 18 and not a party to the within action. My business address is 1125 16th Street, Suite 204, Arcata, CA 95521.

On September 20, 2023, I served the following document(s) described as

PLAINTIFF'S RESPONSES TO DEFENDANT'S FIRST SET OF INTERROGATORIES TO PLAINTIFF

on the interested parties as follows:

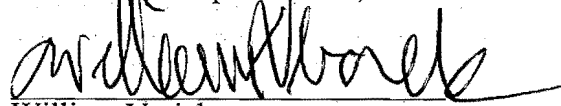
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By agreement of the parties, by personally emailing the aforementioned document(s) in PDF format to the respective email address(es) listed above. I did not receive an electronic message indicating any errors in transmission.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on September 20, 2023 in Arcata, California.


William Verick